EXHIBIT P

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

ALAN WILLIS, Individually and on Behalf of All Others Similarly Situated,

Plaintiff,

vs.

BIG LOTS, INC., STEVEN S. FISHMAN, JOE R. COOPER, CHARLES W. HAUBIEL II and TIMOTHY A. JOHNSON,

Defendants.

No. 2:12-cv-00604-MHW-NMK

Expert Report of Paul A. Gompers
July 28, 2016

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I. Qualifications

1. I am the Eugene Holman Professor of Business Administration at the Harvard Business School. I teach courses and conduct research in corporate finance, the structure and governance of public and private companies, valuation of companies and the behavior of institutional investors, as well as entrepreneurial finance and management, including the venture capital and private equity industry, young start-ups, and high-growth-potential firms. I teach these courses to Ph.D., M.B.A., and Executive Education students. Before joining the Harvard faculty in 1995, I was a member of the faculty at the University of Chicago Graduate School of Business, where I taught entrepreneurial finance from 1993 to 1995. I received an A.B. in Biology from Harvard College in 1987, an M.Sc. in Economics from Oxford University in 1989, and a Ph.D. in Business Economics from Harvard University in 1993.

2. In my career as an academic, I have written numerous case studies and technical notes, and published numerous articles in peer-reviewed finance and economics journals on valuation, venture capital and private equity industries, and entrepreneurial finance. Many of these case studies, notes, and research articles have directly examined financial and valuation issues of companies. I am the coauthor of three books: The Venture Capital Cycle (editions 1 and 2), published by MIT Press, The Money of Invention, published by Harvard Business School Press, and Entrepreneurial Finance: A Casebook, published by John Wiley & Sons, Inc. I am an Associate Editor of the *Journal of Finance*, *Small Business Economics*, and the *Journal of Private Equity*, and a referee for a number of academic journals, including the *Journal of Financial Economics*, the *Journal of Political Economy*, the *Quarterly Journal of Economics*, the *Review of Financial Studies*, and the *Journal of Law and Economics*. I have also served on the boards of directors of several companies, including ZEFER, Mercanteo, and OnTheFrontier.com. My CV is attached as Exhibit 1 to this report.

3. I have served as an expert in a number of legal matters. In these disputes, I have served as an expert on, among other things, whether securities markets were efficient, the valuation of public and private companies, and the factors affecting public company securities prices. These included matters in which I have been asked to analyze alleged damages, as well as numerous matters involving class certification issues. Exhibit 2 contains a list of my testimony over the last four years.

II. Assignment

4. I have been retained by counsel for Big Lots, Inc. ("Big Lots") in this matter to review and comment on certain analyses provided in the Expert Report of Bjorn I. Steinholt filed on May 27, 2016 ("Steinholt Report"). Specifically, counsel asked me to evaluate (1) whether Mr. Steinholt provided sufficient evidence to demonstrate that he could develop a class-wide damages model consistent with Plaintiffs' theory of liability and the Court's ruling on Defendants' Motion to Dismiss, (2) Mr. Steinholt's event study analysis regarding the efficiency of the market for Big Lots' stock, and (3) whether Mr. Steinholt provided evidence of price inflation due to the alleged misstatements.

5. For this matter, I am being compensated at my regular hourly rate of $900. In addition, under my direction, Cornerstone Research has performed research and other support work for me on this matter. My analyses, opinions, and conclusions are based solely on the work performed by me and those under my direction. I have received compensation, and anticipate that I may receive future compensation, from Cornerstone Research that reflects, among other things, my relationship with that firm as an expert on this and other corporate and client matters. My compensation is not contingent upon the conclusions I reach or on the outcome of this matter.

6. A list of documents, data, and other information that I have relied upon in forming the opinions set forth in my report is attached hereto as Exhibit 3. I reserve the right to revise my opinions in light of my ongoing review of the materials I have considered, as well as additional materials, including data, documents, and deposition or other testimony that may subsequently come to light, or if I am asked to perform further research or analysis.

III. Background

7. Big Lots is a discount retailer and describes itself as providing its customers "with great savings on value-priced merchandise."[1] Before 2014, Big Lots' business focused on selling merchandise sourced through closeout channels.[2]

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[1] Big Lots, Inc. Form 10-K for the period ending January 30, 2016 ("2016 Form 10-K"), p. 2.
[2] 2016 Form 10-K, p. 3.

8. Plaintiffs brought this securities fraud class action by alleging that Defendants issued false and misleading statements about Big Lots' business and results during the period February 2, 2012–August 23, 2012.[3] It is my understanding that the Court has already concluded that Plaintiffs failed to adequately state why the alleged misleading statements on February 2, 2012, the first day of the proposed class period, were false.[4] Since the next day with alleged misrepresentations is March 2, 2012, Plaintiffs' proposed class period is now March 2, 2012–August 23, 2012 (the "Class Period"), which is the period analyzed by Mr. Steinholt.[5]

9. Plaintiffs allege that Big Lots did not disclose that the changes implemented by Doug Wurl, a former senior merchandising executive at Sears Holding Corporation who was hired by Big Lots in 2011,[6] caused key personnel to leave Big Lots at the beginning of 2012. Plaintiffs further allege that personnel departures affected Big Lots' merchandising team and damaged Big Lots' critical vendor network, among other allegations.[7]

10. As a result, Big Lots' sales allegedly slowed during the first quarter of 2012 and Defendants' representations during the Class Period allegedly concealed these facts and other information from investors.[8]

11. Plaintiffs also allege that partial disclosures of truth occurred on (1) April 23, 2012, when Big Lots modified its guidance regarding the same store sales growth for the first quarter of 2012, and (2) on August 23, 2012, when Big Lots provided financial results for the second quarter of 2012 and adjusted its 2012 Fiscal Year guidance, among other elements.[9]

12. It is also my understanding that the Court reviewed all the alleged false and misleading statements and ruled that certain of these alleged misrepresentations were not actionable.[10] For example, the Court ruled that the financial guidance and other forward-

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[3] Amended Complaint for Violation of the Federal Securities Laws, In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al., April 4, 2013 ("Amended Complaint"), ¶¶ 1–2.
[4] Opinion and Order of the United States District Court for the Southern District of Ohio. No. 2:12–cv–604 – Judge Michael Wilson, In re Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al., January 21, 2016 ("Opinion and Order"), p. 31.
[5] Expert Report of Bjorn I. Steinholt, CFA, In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al., May 27, 2016 ("Steinholt report"), ¶ 5.
[6] Amended Complaint, ¶ 6.
[7] Amended Complaint, ¶¶ 56–60.
[8] Amended Complaint, ¶¶ 60, 62.
[9] Amended Complaint, ¶¶ 178–179; "Big Lots Updates First Quarter Sales Guidance," PR Newswire, April 23, 2012; "Big Lots Reports Second Quarter EPS From Continuing Operations of $0.36 Per Diluted Share," PR Newswire, August 23, 2012.
[10] Opinion and Order.

looking statements provided by Big Lots on March 2, 2012 and May 23, 2012 are not actionable because these forward-looking statements were accompanied by the adequate warnings and, therefore, are protected under the Private Securities Litigation Reform Act's safe harbor provision.[11] For similar reasons, the Court decided that no misleading statements occurred on June 6, 2012.[12]

IV. Summary of Opinions

13. Below is a brief summary of my opinions in this matter. The bases for these opinions are detailed in the sections that follow.

1) Mr. Steinholt fails to explain how he could develop a methodology for calculating class-wide damages in a manner that is consistent with Plaintiffs' theory of liability and the Court's ruling

- A class-wide damages model must measure only the damages attributable to actionable statements or omissions for which Plaintiffs claim Defendants are liable, while excluding any loss attributable to other causes.
- Mr. Steinholt states that he would employ an "event study damages framework" to develop a class-wide damages model and that it is necessary to focus on stock price reactions to the alleged corrective disclosures. He offers nothing more than generalities about what that means.
- Plaintiffs' experts in securities litigation commonly employ a constant dollar inflation band damages model based on a simple event study. The simple event study is used to determine the stock price declines upon the release of the alleged corrective disclosures, and a backcasting methodology is then employed to calculate the amount of inflation on every day of the Class Period based on these stock price declines (for more details, see Section V.).
- To the extent that Mr. Steinholt proposes such a model, he fails to articulate how it would be possible to develop a constant dollar inflation band model based on a simple event study that would be consistent with Plaintiffs' theory of liability and with the

[11] Opinion and Order, pp. 34–35, 58.
[12] Opinion and Order, p. 63.

Court's ruling regarding the protected forward-looking statements made on March 2, 2012 and May 23, 2012.

- A constant dollar inflation band model implies that the inflation created by the alleged misstatements at the beginning of the Class Period is equal to the sum of the stock price declines upon the release of the alleged corrective disclosures.
  - For this condition to be true, it is necessary to demonstrate that the informational content of hypothetical correct disclosures, made instead of those statements that Plaintiffs allege to have been false ("but-for disclosures"), would have been similar to the informational content of the alleged corrective disclosures. It is also necessary to show that these but-for disclosures would have had the same valuation impact as the alleged corrective disclosures. In addition, this type of model holds the amount of inflation constant for periods of time that do not include alleged corrective disclosures, which implies that the valuation impact of the but-for disclosures is constant during the Class Period and that no but-for disclosure would have occurred after the beginning of the Class Period.
- Because Mr. Steinholt does not attempt to articulate the contents of the but-for disclosures and the times at which they would have been made, he cannot establish that Plaintiffs' theory of liability is consistent with a constant dollar inflation band damages model. Without this "but-for world", it is not possible to evaluate the informational content of the but-for disclosures and their valuation impact on the stock price in order to estimate the stock price if the market had knowledge of the allegedly concealed facts ("but-for stock prices").
- A review of the facts and allegations shows that it is unlikely that the but-for disclosures and the alleged corrective disclosures would have conveyed the same value-relevant information, because some but-for disclosures could only have disclosed a risk and the corresponding corrective disclosures disclosed the materialization of this risk. This difference in the informational content of these disclosures would mean that they could not have had the same valuation impact on a stock traded in an efficient market. In addition, this review

reveals that some but-for disclosures may have been made after the beginning of the Class Period, because the truth about certain alleged misstatements may not have been known or knowable until such time.

- A constant dollar inflation band model is based on the stock price declines related to the alleged corrective disclosures. Mr. Steinholt does not explain how a simple event study could determine these stock price declines.
  - The simple event study estimates the stock price decline associated with all the pieces of information released on a specific day. Therefore, it cannot remove from this decline (1) the impact of confounding information *(i.e.*, information unrelated to statements that Plaintiffs allege to have been false), and (2) the impact of information that removed the influence of the protected forward-looking statements on the stock price. These two adjustments are necessary to determine the stock price declines associated with the alleged corrective disclosures.
  - Also, a simple event study does not allow for an allocation of a portion of the stock price decline related to the alleged corrective disclosures to each corrective disclosure and, ultimately, does not allow for apportioning inflation over the various alleged misstatements. This feature is critical to accommodate potential findings of fact, at trial or before, that certain alleged misstatements did not give rise to liability, and to calculate adjusted damages.

- If Mr. Steinholt plans to employ some other, more flexible damages model, he still fails to show in his report how he could develop any class-wide damages model consistent with Plaintiffs' theory of liability and the Court's ruling on Defendants' Motion to Dismiss. Mr. Steinholt does not provide any details regarding:
  - the informational content and the timing of the but-for disclosures that Plaintiffs believe Big Lots should have made, and how he would evaluate how investors would have reacted to these alternative disclosures in order to estimate but-for stock prices;
  - how his model would integrate the but-for disclosures that would have occurred after the beginning of the Class Period and could have created an amount of inflation that would have varied over time; or

  - how he would accommodate the Court's ruling regarding the protected forward-looking statements by removing the influence on the but-for stock price of any but-for disclosures related to these statements.

2) Mr. Steinholt's analysis of the fifth *Cammer* factor is flawed and insufficient to empirically show that company-specific information was quickly and fully reflected in Big Lots' stock price

- Mr. Steinholt performed an event study purportedly designed to test whether the market quickly and fully integrated new company-specific information into the market price of Big Lots' stock. This event study is used to analyze the fifth *Cammer* factor.[13]
- Mr. Steinholt's analysis of the cause-and-effect relationship between the release of company-specific information and the movement of Big Lots' stock price is flawed and unscientific.
  - A scientific analysis of this cause-and-effect relationship requires that one posit, in advance, how a stock traded in an efficient market would be expected to react to the events being considered. Without defining a standard to assess whether Big Lots' stock quickly and fully integrated new company-specific information, market efficiency cannot be tested. A sound framework for this analysis requires that one (1) identify events that could have conveyed unexpected, value-relevant information to the market, (2) analyze these events and determine whether the mix of information associated with each event was indeed unexpected and value-relevant, (3) use this analysis of the information to form hypotheses concerning expected stock price movements on these days, including the expected direction of the stock price movements, and (4) test these ex-ante hypotheses against the actual stock price movements on the relevant days.
  - Because Mr. Steinholt does not predict whether the financial information released on these four non-corrective disclosure dates should have caused the stock price to react, or the direction of any predicted price movement, his

[13] In my opinion, the other four *Cammer* factors and the three *Krogman* factors mentioned by Mr. Steinholt are insufficient to show market efficiency because they do not address the central question at issue: whether Big Lots' stock price fully and quickly integrated all publicly available information during the Class Period.

analysis is unscientific and does not allow him to conclude that Big Lots' stock price quickly and fully integrated company-specific information on these four days.

- Mr. Steinholt mentions this ex-ante hypothesis framework in his report and claims that developing a hypothesis regarding whether specific information will cause an observable stock price movement is often subjective and, therefore, the analysis that he performed is preferable. This argument lacks merit in many respects.
  - Mr. Steinholt does not provide any evidence that he tried to develop ex-ante hypotheses for the four non-corrective disclosure days and could not successfully do so. Assuming that he could not develop ex-ante hypotheses for these days, then the scientific conclusion is that he should not have used these days for this analysis.
  - Mr. Steinholt appears to provide ex-ante hypotheses for the two alleged corrective disclosure days that he also uses in this analysis without explaining why it is possible to do so for these two days but not for the other four days.
- The use of the alleged corrective disclosure dates to analyze the cause-and-effect relationship is inappropriate, inconsistent with the ex-ante hypothesis framework, and represents an ex-post analysis.
  - The ex-ante framework requires that one evaluate the stock price impact of the information released on a certain day without knowing the actual price movement. This ensures that the expert's assessment of the expected price impact of the information released on a specific day is objective and not biased by the knowledge of the actual price movement.
  - In the context of securities litigation, alleged corrective disclosure dates are typically associated with significant stock price declines. Otherwise, Plaintiffs would have little incentive to file a lawsuit since expected damages would be insignificant. Therefore, it is likely that Mr. Steinholt knew before starting his analysis that April 23, 2012 and August 23, 2012 were associated with large stock price declines.

3) Mr. Steinholt fails to provide any evidence of price inflation due to the alleged misstatements

- A possible way for Mr. Steinholt to show that inflation was created is to demonstrate that the alleged misstatements caused a positive and statistically significant price return. However, the statistical analysis provided by Mr. Steinholt does not support this type of price impact.
- Based on Mr. Steinholt's regression analysis, only the impact dates associated with the alleged misstatements made on March 2, 2012 and April 23, 2012 (the date of the first alleged corrective disclosure) have a statistically significant residual stock price return at the 95% confidence interval level. Yet, those residual returns were negative and were associated with stock price decreases, not increases.
- While Mr. Steinholt describes a theory of price maintenance, implying that the alleged misrepresentations were considered by the market to be confirmatory statements that did not provide new and value-relevant information, he does not provide any evidence that this price maintenance theory is applicable to the facts in this case and created inflation.

V. Mr. Steinholt fails to articulate a class-wide damages methodology that is consistent with Plaintiffs' theory of liability and with the Court's ruling

14. Counsel for Big Lots has asked me to opine on whether Mr. Steinholt has specified a methodology for calculating damages on a class-wide basis that is consistent with Plaintiffs' theory of liability and the Court's ruling on Defendants' Motion to Dismiss. Such a model would have to measure only those damages attributable to actionable statements or omissions for which Plaintiffs claim Defendants are liable, while excluding any loss attributable to other causes.[14]

15. In my opinion, Mr. Steinholt has failed to specify a methodology for calculating class-wide damages in a manner that is consistent with Plaintiffs' theory of liability. Although Mr. Steinholt states that he would employ an "event study damages framework," he offers nothing more than generalities about what that means. He fails to explain how he would construct a damages model in this case.

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[14] *Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1431 (2013) ("*Comcast*").

16. As I explain below, the nature of this particular case may pose significant obstacles to constructing a damages model based upon an event study methodology. Mr. Steinholt does not explain—or even try to explain—how he would surmount those obstacles.

17. From an academic or a practical standpoint, simply stating that one will use an "event study framework" is insufficient to give any degree of confidence that a model can be used to calculate class-wide damages in this case.

18. This section proceeds in four parts.

a. In Part A, I explain what an "event study" is. Although Mr. Steinholt claims he will use an "event study framework" to calculate damages in this case, Mr. Steinholt never defines what an event study is. Therefore, I explain what economists mean by the phrase "event study" and describe how an event study may be used to calculate damages in some securities cases under particular sets of assumptions about the theory of liability and the facts of the case.

b. In Part B, I summarize Mr. Steinholt's statements regarding the calculation of class-wide damages in this case.

c. In Part C, I explain that if Mr. Steinholt considers developing a "constant dollar inflation band" methodology based on a simple event study, a methodology that is commonly employed by plaintiffs in securities actions, he has failed to show how this methodology can be used to calculate damages on a class-wide basis in this case given the facts of the case and the theory of liability.

d. In Part D, I explain that Mr. Steinholt has not proposed any other methodology that could be employed to calculate damages on a class-wide basis in this action, and I describe the considerable challenges that the use of any such methodology would need to overcome.

A. Event studies and damages calculation

19. In this section, I first explain what an event study is. I then describe how a simple event study may be used to calculate damages in some securities cases.

1. Event studies

20. Economists use event studies to measure the effect of an economic event on the value of a firm. In most applications, the goal is to estimate the effect of an event on the price of a

class of securities such as common equity.[15] Even if there is no unique structure, the following steps are usually implemented:

a) Event definition: The first step in an event study is to define the event of interest and to determine the period of time over which the event at issue may have affected the stock price, *i.e.*, the event window. For example, in the context of securities litigation, the event is the alleged corrective disclosure, and its impact on the stock price is typically analyzed using daily returns. To the extent that multiple pieces of information are released on the same day, it is critical to identify the piece of information that represents the corrective disclosure and the pieces of information that are unrelated to the allegations (*i.e.*, confounding information).

b) Abnormal return (or residual return) associated with the event: The abnormal return is the portion of the stock price return that may have been caused by the event at issue. The abnormal return is the difference between the actual return over the event window and the return that would have been expected if the event had not occurred. Economists need to develop a model to estimate this expected return. A statistical tool named regression analysis can be used to perform this estimation. This regression analysis measures the typical relationship between the company's stock price movement and the stock price movement of the market and/or industry to which the company belongs. Then, based on the typical relationship between the company's stock price movement and its industry/market movement, the economist can determine the expected return on any given day by using that day's market and/or industry return to calculate the expected return based upon this normal relationship. To the extent that the event at issue is not the only piece of information released during the event window, however, the difference between the actual return and the expected return is insufficient to determine the portion of the stock price return associated exclusively with the event at issue. In these circumstances, this difference represents the portion of the stock price return that may be associated with the impact of all the pieces of information released on this day, and not only the impact of the

[15] John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, "The Econometrics of Financial Markets," Princeton University Press, p. 149.

event at issue. As a result, the regression analysis needs to be replaced by or supplemented with other tools.

c) Estimation procedure: When the model to determine the expected return has been chosen, the parameters of this model must be estimated. To do so, an estimation window is used. This estimation window is different from the event window. For example, the coefficient of the regression analysis may be estimated by using the stock price, market, and industry information during a period of time that precedes the event window and/or follows the event window.

d) Testing procedure: It is critical for the economist to determine the hypothesis that he or she wants to test with respect to the event at issue. Such a hypothesis could be whether the market reacted to this event. If so, the economist tests whether the abnormal return associated with the event window is statistically different from zero (*i.e.*, statistically significant). When this is the case, then it is possible to conclude that the market likely reacted to the event and the stock price movement was unlikely to be the result of random daily price movements.[16]

2. Calculating damages using a simple event study

21. In my experience, when event studies are used by plaintiffs to calculate damages, plaintiffs' experts generally employ a backcasting methodology to determine inflation based on the stock price declines estimated by the event study. In the simple case, with a single misstatement and a subsequent corrective disclosure, a simple event study using a regression analysis based on daily stock price returns is performed to determine the residual stock price return associated with the corrective disclosure. That residual stock price return is then translated into a dollar amount and this dollar decline is then used as a measure of the amount of "inflation" for the period between the alleged misstatement and the alleged corrective disclosure.

22. Inflation is the difference between the actual stock price and the stock's true value, *i.e.*, the stock's value if the market had knowledge of the allegedly concealed facts (a price

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[16] John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, "The Econometrics of Financial Markets," Princeton University Press, pp. 150-152.

referred to by Cornell & Morgan as the "equivalent disclosure" price, also known as the "but-for" price).[17] For each class member, the difference between the market price paid and the true value, *i.e.*, the amount of inflation, at the time of purchase and the time of sale can be used to calculate damages if there is a corrective disclosure between these dates.

23. In cases with multiple corrective disclosures, this methodology requires that a separate inflation "band" be calculated for each period of time between alleged corrective disclosures and from the beginning of the Class Period to the first corrective disclosure. The amount of inflation on any day in the Class Period is equal to the sum of the stock price declines related to the alleged corrective disclosures that occurred after the date on which the amount of inflation is estimated. This is a backcasting methodology since the amount of inflation on a specific date is based upon stock price declines that occurred after this date. Because these inflation bands are each calculated on a constant dollar basis, this backcasting method can be referred to as a constant dollar inflation band model.

B. Overview of Mr. Steinholt's statements regarding the calculation of class-wide common stock damages

24. Mr. Steinholt purports to specify a class-wide damages methodology in Section V of his report. Section V consists of only six paragraphs, which are numbered 53 through 58.

25. In paragraph 53, Mr. Steinholt explains that in "[s]ecurities cases, such as this one," damages occur when investors purchase securities at prices that have been artificially inflated by false or misleading information disclosed to the market. Such investors "are then damaged when the alleged truth is disclosed, causing the stock price to decline and investors to suffer economic losses as a result."

26. In paragraph 54, Mr. Steinholt contends that in cases involving statements that are alleged to have "concealed adverse facts that were known by Defendants" . . . "the key issue to focus on, when calculating damages, is the stock price reaction to the partial disclosures of the alleged truth." Mr. Steinholt states that this is because such cases involve "misrepresentations [that] would have maintained the stock price, causing it to trade at a level than it otherwise would have", but does not opine that any such "maintaining" of Big Lots'

[17] Bradford Cornell and R. Gregory Morgan, "Using Finance Theory to Measure Damages in Fraud on the Market Cases," UCLA Law Review, Vol. 37, 1990 ("Cornell and Morgan"), p. 894.

stock price occurred in this case. He opines only that, in cases where there is price maintenance, damages may be calculated by examining the dates on which "corrective" disclosures allegedly were made.

27. In paragraph 55, Mr. Steinholt mentions the two alleged corrective disclosure dates cited in the Amended Complaint–April 23, 2012 and August 23, 2012–and asserts that, in an efficient market, the impact of the alleged corrective disclosures can be quantified by analyzing the market prices, and class-wide damages can be calculated. He also adds that "an event study damages framework based on analyzing Big Lots' market prices can be used to calculate class-wide damages consistent with Plaintiff's theory of liability."

28. In paragraph 56, Mr. Steinholt cites to two academic articles. The first, by Mitchell & Netter, is cited for the proposition that an event study methodology can allow the investigator to assess "whether information that is used in an allegedly fraudulent action is important to investors and to determine the value of the information." The second, by Cornell & Morgan, is cited as a source to explain how the event study framework can be used to quantify "the impact of fraud related information on the stock price at the time of the disclosure" and to estimate inflation throughout the Class Period. It is notable that, while Mr. Steinholt does not explicitly say that he will employ the methodology described by Cornell & Morgan, he cites to no other authority or academic research purporting to describe the methodology that he intends to employ.

29. In Paragraph 57, Mr. Steinholt acknowledges that any damages calculation may need to be modified to conform to the 90-day bounce-back provision contained in the Private Securities Litigation Reform Act of 1995.

30. In sum, Mr. Steinholt offers generalities rather than explaining specifically how he would calculate damages in this matter or how any such calculations would relate to Plaintiffs' theory of liability and facts of this case.

31. Mr. Steinholt concludes in paragraph 58 by stating that he and unnamed "other experts have used this event study damages framework in numerous securities cases going to trial", without providing any examples of any such cases. He goes on to assert that his proposed framework is "flexible" and can be "modified as a result of additional information obtained through discovery or future legal rulings" or verdicts, without explaining how such modifications would, or could, be made and how they would be employed in this case specifically given the theory of liability and facts.

C. Mr. Steinholt does not demonstrate how a constant dollar inflation band damages model based on a simple event study focusing on the stock price declines upon the release of the alleged corrective disclosures is consistent with Plaintiffs' theory of liability and the Court's motion to dismiss ruling

32. Mr. Steinholt appears to indicate that his methodology would quantify inflation throughout the Class Period based on an event study focusing on the two alleged corrective disclosures.[18] While Mr. Steinholt does not specifically explain how he would perform such a calculation, he does indicate that doing so would involve quantifying the price impact of the alleged corrective information released on April 23, 2012 and August 23, 2012, and that these impacts could be used to calculate inflation on every day of the Class Period.[19] As explained above, plaintiffs who use the stock price declines upon the release of alleged corrective disclosures typically translate these declines into inflation by employing a backcasting methodology, constant dollar inflation band model.

33. Under this methodology, Mr. Steinholt would determine the stock price declines associated with the alleged corrective disclosures on April 23, 2012 and August 23, 2012. He would then use the stock price decline on August 23, 2012 as a measure of the amount of inflation between April 24, 2013 and August 23, 2012, keeping the amount of inflation constant in dollar terms.[20] Similarly, he would sum the stock price declines on April 24, 2012 and August 23, 2012 as a measure of the amount of inflation between the beginning of the Class Period and April 23, 2012, keeping the amount of inflation constant.

34. In order to determine the stock price declines associated with the alleged corrective disclosures, Mr. Steinholt may plan to (1) employ a simple event study based on a regression analysis using daily stock returns in order to determine the expected returns on April 24, 2012 and August 23, 2012 as explained in section V.A.1., and (2) use the difference between the actual returns and the expected returns on those dates to determine the stock price declines associated with the alleged corrective disclosures.

35. Mr. Steinholt's expert report fails to explain how this constant inflation band model based on a simple event study would be consistent with Plaintiffs' theory of liability and the Court's ruling on Defendants' Motion to Dismiss. This methodology assumes that the

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[18] Steinholt report, ¶ 56.
[19] Steinholt report, ¶¶ 55–56.
[20] Sometimes experts propose to keep the inflation constant in percentage terms.

inflation at the beginning of the Class Period resulting from the alleged misstatements is equal to the stock price declines that were determined using the simple event study. As I will explain below, establishing this assumption faces many obstacles and Mr. Steinholt does not show how this assumption could hold in a way consistent with Plaintiffs' theory of liability and the Court's ruling regarding the protected forward-looking statements.

1. Mr. Steinholt does not propose how, or that, he would effectively construct a but-for world which would allow him to confirm the usefulness of a constant dollar inflation band damages model.

36. In order to calculate damages using a constant dollar inflation band damages model, it is necessary to show that the informational content of hypothetical correct disclosures, made instead of those statements which Plaintiffs allege to have been false ("but-for disclosures"), would have been similar to the informational content of the alleged corrective disclosures. It is also necessary to show that these but-for disclosures would have had the same valuation impact as the alleged corrective disclosures, and that the but-for disclosures with valuation impact would have happened at or before the beginning of the Class Period.

37. The last condition stems from the fact that a constant dollar inflation band damages model implies that inflation bands are constructed solely based on the stock price declines upon the release of the alleged corrective disclosures. For the difference between the actual price and the but-for price at the beginning of the Class Period to equal the sum of the stock price declines upon the release of the alleged corrective disclosures, the information conveyed through the but-for disclosures at or before the beginning of the Class Period must be similar to the alleged corrective information that impacted the stock price. If a but-for disclosure had been made between the beginning of the Class Period and the first alleged corrective disclosure date, then this condition would not be satisfied.

38. Because Mr. Steinholt does not attempt to articulate the contents of but-for disclosures and the times at which these but-for disclosures would have been made, he cannot establish that Plaintiffs' theory of liability is consistent with a constant dollar inflation band damages model. The academic article by Cornell & Morgan cited by Mr. Steinholt as the sole source of his proposed damages model emphasizes the necessity of having a detailed understanding of the alleged misrepresentations, omissions, and corrective disclosures in order to evaluate whether a specific model may be able to measure damages related to alleged misstatements or omissions.

> "[T]he limits of the explanatory power of the model must be understood. Part II of this Article demonstrates that substantial factual analysis must precede the use of the model. Without a detailed understanding of the information misrepresented or omitted, the information eventually revealed, the difference between these two sets of information, and the other information available to the market, litigants and lawyers cannot be confident that what the…model measures is really the economic effect of the fraud. Part II shows that different calculations…may over- or under-estimate damages because both the comparable index approach and the event study approach involve potential bias. The extent of this bias again depends on the facts of the case; it cannot be determined by financial economic theorizing."[21]

This passage shows that a damages model—including one based on an event study approach—can be biased because it may not be suitable for the facts and allegations in a particular case.

39. Therefore, to demonstrate that a constant dollar inflation band model based on a simple event study can be used to calculate damages on a class-wide basis in this matter, it is critical to analyze all the facts and allegations, and to develop a "but-for world," an alternative series of events that would have resulted had no misstatements been made. Without doing so it is not possible to evaluate whether a constant dollar inflation band model accurately calculates the amount by which a company's stock was inflated on any given day.

40. The development of the but-for world requires a deep understanding of Plaintiffs' theory of liability so that one can determine the information that would have been available to the market and when such information would have been available to investors if Defendants had disclosed the allegedly concealed facts rather than making the alleged misrepresentations. Constructing the but-for world also requires, therefore, a detailed understanding of the facts as they existed at the time of the alleged misrepresentations and at the time of any alleged corrective disclosures. Since Mr. Steinholt fails to explain how, or even that, he would do this, he cannot show that the but-for world can be constructed; he cannot show how investors would have behaved in response to the hypothetical alternative disclosures that would have been made in the but-for world; and, ultimately, he cannot show that the constant dollar inflation band model is consistent with Plaintiffs' theory of liability.

[21] Cornell and Morgan, pp. 923–924.

41. In his deposition, Mr. Steinholt agreed with this but-for world framework when he stated, "what drives the damage analysis is the alleged truth and the disclosure of the alleged truth."[22] He also agreed that the times at which these but-for disclosures would have been made matters: "the question is does the alleged truth that is being concealed change over this period of time, and if that is… so…then that would impact inflation."[23]

2. Mr. Steinholt does not explain how a constant dollar inflation band damages model can be used in this matter with numerous alleged misstatements

42. In order to create a model capable of calculating damages on a class-wide basis, Mr. Steinholt must define the but-for world and calculate, for the entire Class Period, what Cornell & Morgan refer to as a "value line," a curve reflecting the but-for prices of Big Lots' stock and which, when subtracted from the curve reflecting market prices, can be used to calculate the amount by which the price of the stock was inflated on each day of the Class Period.[24] A review of the complaint in this matter shows that it is likely that a proper but-for world would include numerous but-for disclosures that may have been made at different times, each potentially having an independent impact on the value curve.

43. Plaintiffs allege that Big Lots did not disclose that key personnel left at the beginning of 2012, which affected its merchandising teams and its critical vendor network.[25] Plaintiffs also allege that Big Lots made misleading statements on March 2, 2012 about its sales regarding the electronics business line and its consumable closeout opportunities, among other allegations.[26] After the Court's ruling on Defendants' Motion to Dismiss, there are nine days on which alleged misrepresentations occurred.[27] It is reasonable to believe that, in the but-for world, many of the allegedly concealed facts on which Plaintiffs' theory of liability rests would have been disclosed, and the constant dollar inflation band damages model needs to evaluate the impact on damages of each and every one of these numerous but-for disclosures. For example, regarding March 2, 2012, Mr. Steinholt needs to (1) articulate

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[22] Deposition of Bjorn I. Steinholt, *In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al.* ("Steinholt deposition"), p. 72, 9-11.
[23] Steinholt deposition, pp. 44-45, 24-25, 1-4.
[24] Cornell and Morgan, pp. 885–886.
[25] Amended Complaint, ¶ 9.
[26] Amended Complaint, ¶ 77.
[27] Opinion and Order.

whether but-for disclosures about the departure of key personnel and its impact on the vendor network, the electronics business line, and closeout opportunities, among other items, would have been made, (2) provide details regarding the informational content of these but-for disclosures, and (3) evaluate whether the exact same information was disclosed on the alleged corrective disclosure dates.

44. As explained above, if Mr. Steinholt plans to employ a constant dollar inflation band model based on a simple event study, he must show how the informational content of the alleged corrective disclosures is similar to that of the hypothetical but-for disclosures and that the price impacts of the two sets of disclosures would have been the same despite the fact that they would have been made at different times and possibly in different external environments. Also, he must show that these price impacts would have been constant throughout the Class Period. Mr. Steinholt must also explain how, in light of potential but-for disclosures that could only have been made after the beginning of the Class Period, the constant dollar inflation band model is appropriate. Mr. Steinholt does not provide any information in his report to address these issues.

45. A review of the facts and allegations in this case shows that it is unlikely that the but-for disclosures and the alleged corrective disclosures would have been similar. For example, based on Plaintiffs' allegations, Big Lots, in the but-for world, could have disclosed on March 2, 2012 that the electronics business line was affected by the departure of key personnel and that there was a risk that this underperformance might continue. Big Lots could not have indicated, however, that it was certain that this business line would continue to underperform and for how long. In contrast, the alleged corrective disclosure on April 23, 2012 shows that the electronics business line had been underperforming until that date, but the second alleged corrective disclosure indicates that the electronics business line ceased underperforming in the second quarter of 2012.[28] In other words, a but-for disclosure discloses a risk and the corrective disclosure discloses the materialization of this risk. As a result of their different natures, one would expect the stock price impact of these two disclosures to be different. Using the stock price decline upon the release of an alleged corrective disclosure to measure of the amount of inflation caused by an earlier statement

[28] "Big Lots Updates First Quarter Sales Guidance," PR Newswire, April 23, 2012; Big Lots, Inc. Form 8-K Exhibit 99.2, August 28, 2012 ("Earnings Conference Call, August 23, 2012").

mischaracterizing a business risk could, therefore, overstate damages. The following example illustrates this difference:

> Imagine that a company concealed that it was going to draw a marble from an urn of 100 marbles, of which 99 were black and one was red. If the company drew a red marble, it would have to pay $1 million. The company drew the red marble and only informed the market after the drawing. As a result, the company's market value reflected the loss and declined by $1 million. If, however, the company had disclosed that it was going to draw a marble, the company's market value would have reflected the expected loss from this lottery of 1% of $1 million, or $10,000. If the company subsequently drew the red marble, the market value would have fallen $990,000 to reflect the new information—the certainty of a $1 million loss.

46. Another illustration of issues with asserting equivalence between the but-for disclosures and the alleged corrective disclosures is that it is unlikely that on March 2, 2012, Big Lots could have provided the exact earnings per share result for the second quarter of 2012 which it ultimately disclosed on August 23, 2012. On August 23, 2012, Big Lots had the benefit of data concerning its performance between May and July 2012 on which to base its disclosure. It is unlikely that any results or statements made by Big Lots on the alleged corrective disclosure dates that reflected information collected concerning recently ended periods could have been made with the same precision in the but-for world at an earlier time.

47. A constant dollar inflation band model also faces challenges calculating damages related to but-for disclosures that could only have occurred, because the truth about certain alleged misrepresentations or omissions could not have been known before a certain date, after the beginning of the Class Period. This matter may present such a challenge.

48. For example, according to Plaintiffs' allegations, in the but-for world Big Lots may have disclosed on March 2, 2012 a slowdown in sales and issues regarding key personnel departures that could foreseeably impact the electronics and consumables business lines, the two business lines that underperformed during the first quarter of 2012.[29] However, the business lines that underperformed in the second quarter of 2012 were different. During the earnings conference call on August 23, 2012, Big Lots' CEO mentioned that furniture, home,

[29] "Big Lots Updates First Quarter Sales Guidance," PR Newswire, April 23, 2012.

and seasonal were the weakest business lines for the second quarter of 2012, whereas electronics and consumables experienced improvement.[30] It appears unlikely that Big Lots would have been able to indicate on March 2, 2012 that these business lines were affected by recent events. Consequently, Mr. Steinholt needs to determine when, to be consistent with Plaintiffs' theory of liability, Big Lots would have had to disclose information about these other business lines after the first alleged corrective disclosure date, when the risk associated with these business lines became more discernible. These potential but-for disclosures after the beginning of the Class Period illustrate that the inflation amount may vary over time in a way that is inconsistent with a constant dollar inflation band model that only considers the times at which the alleged corrective disclosures were made. In his deposition, Mr. Steinholt recognized this possibility: "maybe the starting point for the inflation relating to the August decline—maybe the starting point is different than at the beginning of the class period."[31] However, it appears that he did not try to make this determination based on Plaintiffs' theory of liability and did not explain how he would specifically address this issue if necessary.

3. Mr. Steinholt fails to show how he could use a simple event study to (1) determine the stock price declines that are associated with the release of the alleged corrective disclosures, (2) accommodate the Court's ruling about certain protected forward-looking statements, and (3) allocate a portion of the stock price declines to each alleged corrective disclosure

49. If stock price declines upon alleged corrective disclosures are the basis for the damages calculations, it is necessary for any class-wide methodology to control for confounding information and remove the influence of any protected, non-actionable statements in order to isolate losses that are associated with the correction of only the specific alleged misstatements. Using a simple event study as described in paragraph 34 does not provide the flexibility necessary to perform such calculations. Nor does it provide the flexibility necessary to allocate a portion of the stock price declines to each of the alleged corrective disclosures. Mr. Steinholt does not provide any information regarding these challenges.

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[30] Earnings Conference Call, August 23, 2012.
[31] Steinholt's deposition, p. 35, 8-11.

50. First, Mr. Steinholt does not explain how his damages methodology could remove the impact of confounding information on the stock price declines that occurred on the two alleged corrective disclosure dates. During his deposition, Mr. Steinholt agreed that this is an important factor to consider.[32] For example, on August 23, 2012, Big Lots' management disclosed to analysts, during its earnings conference call, several initiatives to bring more customers into its stores. Specifically, Big Lots announced that it would begin testing the introduction of coolers and freezers in its stores, the acceptance of SNAP benefits, a new rewards loyalty program in several markets, and store remodeling.[33] These disclosures appear unrelated to Plaintiffs' allegations and Mr. Steinholt does not explain how he would evaluate the impact of these disclosures on Big Lots' stock price and, if needed, how he would remove this impact to isolate the price impact of disclosures that are relevant to Plaintiffs' theory of liability. As explained in section V.A.1., the difference between the actual returns and the expected returns on April 24, 2012 and August 23, 2012 may reflect the impact on stock price of all the pieces of information released on these days, including the confounding information. Therefore, this difference may not measure the price impact associated exclusively with the alleged corrective disclosures. More generally, because Mr. Steinholt does not show that he understands Plaintiffs' theory of liability in sufficient detail to describe a but-for world, he cannot distinguish between information relevant to Plaintiffs' claims and confounding information.

51. Second, Mr. Steinholt does not provide information regarding how he would apportion the stock price declines on April 24, 2012 and August 23, 2012 to remove the impact of protected forward-looking statements made on March 2, 2012 and May 23, 2012. It is possible that these statements influenced the stock price when they were made, and a portion of the stock price declines on April 24, 2012 and August 23, 2012 may have resulted from new information relevant to earnings expectations that could have removed the influence of the protected forward-looking statements. Because the Court has previously ruled that these statements cannot give rise to liability, Mr. Steinholt cannot use any declines associated with those statements to calculate damages. Yet, Mr. Steinholt does not articulate how his damages methodology would account for these statements, or even assert that it can.

[32] "With respect to the corrective disclosures, you know, are there confounding factors? That's another thing they can take a look at." Steinholt deposition, p. 75, 10-12.
[33] Earnings Conference Call, August 23, 2012.

52. Third, a proper damages model must allocate damages to each alleged misstatement. Again, Mr. Steinholt does not explain in his expert report how he would allocate portions of the stock price declines upon the release of the alleged corrective disclosures to each alleged corrective disclosure. Each corrective disclosure should correct an alleged misstatement and, in a constant dollar inflation band damages model, the stock price impact of the alleged corrective disclosure is a measure of the stock price impact of the but-for disclosure that would have corrected the alleged misstatement. In other words, the stock price decline associated with a specific alleged corrective disclosure is a measure of the inflation caused by the corresponding alleged misstatement. If a finding of fact were made, either at trial or before, that certain alleged misstatements did not give rise to liability, it would not be possible for a model incapable of apportioning inflation among the various alleged misstatements to calculate damages in light of that finding. Mr. Steinholt has given no indication that his proposed methodology is capable of accounting for such complications.

D. More generally, if Mr. Steinholt considers a damages model different than the constant dollar inflation band model based on a simple event study, he fails to articulate how this model would be consistent with Plaintiffs' theory of liability and the Court's ruling

53. If Mr. Steinholt plans to employ some other, more flexible damages model based on techniques that are different from a backcasting approach based on a simple event study, he will still need to calculate any alleged inflation of Big Lots' stock price for each day of the Class Period in order to calculate damages on a class-wide basis. He will, therefore, still need to construct a detailed but-for world and create a value line for Big Lots' stock covering the entire Class Period.

54. In other words, any damages model needs to define the informational content and the timing of the but-for disclosures that Plaintiffs believe Big Lots should have made. And any such model must also evaluate how investors would have reacted to these alternative disclosures in order to estimate but-for stock prices and construct a value line. Without doing so, the amount of inflation cannot be calculated and damages cannot be determined. As Cornell & Morgan explain:

> "The equivalent disclosure price is the price at which the security would have traded if the omitted and misrepresented information–and only that information–were accurately disclosed …, [and] one must estimate the impact on security prices of the disclosure of that information, and only that information. As *Basic* and *Liggett &*

> *Myers* illustrate, only in rare circumstances does [the estimate of this impact] involve observing the market price of the security on a date by which all elements of the fraud have been revealed because, by that time, the market price has been affected by more information than just the information misrepresented or omitted."[34]
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> "In most circumstances, the parties must conduct financial analysis to determine the price at which the security would have traded had the misrepresented or omitted information, and only this information, been disclosed. Such an analysis further requires estimating how investor beliefs will respond to hypothetical disclosures. Although financial economic theory provides detailed procedures for calculating prices *given* investor assessments, it is of little aid in determining how investor beliefs will respond to specific disclosures. Estimating investor assessments requires a detailed investigation of the facts as they existed at the time of the misrepresentation or omission and at the time of disclosure."[35]

55. As explained above, the process of constructing the but-for world in this matter is likely to be particularly difficult because there are numerous alleged misstatements and some but-for disclosures could likely only have been made after the beginning of the Class Period.

56. Moreover, given the negative nature of the potential but-for disclosures on March 2, 2012, it is likely that Big Lots would have provided lower financial guidance, in the but-for world, for fiscal year 2012 and for the first quarter of 2012 than it actually provided. However, as previously noted, the impact of this change on the but-for stock price cannot be used to calculate damages. A proper damages model needs to remove the influence of any hypothetical alternative guidance on March 2, 2012 to be consistent with the Court's ruling that statements concerning guidance made on that date were protected forward-looking statements. Similar considerations need to be made with respect to May 23, 2012, when Big Lots adjusted its financial guidance for Fiscal Year 2012 and provided financial guidance for the second quarter of that year.[36]

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[34] Cornell and Morgan, pp. 894–895.
[35] Cornell and Morgan, p. 897.
[36] "Big Lots Reports First Quarter Adjusted EPS From Continuing Operations of $0.68 Per Diluted Share," PR Newswire, May 23, 2012.

57. As explained above, to be consistent with Plaintiffs' theory of liability, any damages model needs to account for the times at which the potential but-for disclosures might have occurred. The truth about certain alleged misstatements may not have been known or knowable by Big Lots until after the beginning of the Class Period. Therefore, the corresponding but-for disclosures would have had to be made after March 2, 2012, and their impacts on the but-for stock price would have caused the amount of inflation to vary over time. The example provided in Section V.C.2. is related to the potential but-for disclosures about the business lines that underperformed during the second quarter of 2012 but performed well during the first quarter of 2012. There is no evidence that Big Lots could have known about the issues regarding these business lines on March 2, 2012.

58. Also, the impact of any hypothetical alternative disclosures on events that occurred later during the Class Period may be an additional source of variation in the amount of inflation. For example, the stock price impact of the earnings announcement on May 23, 2012 could have been different in the but-for world because of the but-for financial guidance provided on March 2, 2012. Since the financial guidance would likely have been different on March 2, 2012 in the but-for world, Mr. Steinholt needs to determine whether the earnings per share result of the first quarter of 2012 would have been in line with, exceeded, or missed the but-for March 2, 2012 financial guidance and how the market would have reacted to these results. The resulting impact on the but-for price may generate an amount of inflation on this day different from that on the previous day.

59. Lastly, any damages model must account for the fact that some alleged misstatements appear to be related to events that occurred before the beginning of the Class Period. For example, Plaintiffs allege that the statement made by Big Lots' CEO during the earnings conference call on March 2, 2012 concerning "significant improvements in [consumables] in 2011 with our merchandise, with planned events, and our team, and the changes have translated into meaningful sales growth" was false.[37] This allegation suggests that Big Lots did not experience significant improvements in consumables in 2011 and that but-for disclosures may have been necessary in 2011, before the beginning of the alternative Class Period, to correct this alleged misrepresentation. If so, Mr. Steinholt needs to take these

[37] Opinion and Order, pp. 34–36.

earlier but-for disclosures into account in order to estimate the amount of inflation at the beginning of the alternative Class Period.

60. A proper damages model needs to integrate the potential complexity of the but-for world. Mr. Steinholt does not demonstrate how he would develop a class-wide damages model that would (1) evaluate the impact on the but-for stock prices of each of the but-for disclosures, (2) take into account the potential time-varying nature of the amount of inflation due to these but-for disclosures, and (3) remove the influence of the but-for disclosures that are related to the protected forward-looking statements on the but-for stock price. As a result, he fails to articulate a class-wide damages model that is consistent with Plaintiffs' theory of liability and the Court's ruling on Defendants' Motion to Dismiss.

VI. Mr. Steinholt's analysis of the fifth *Cammer* factor is flawed and insufficient to empirically show that company-specific information was quickly and fully reflected in Big Lots' stock price

61. In addition to his discussion concerning damages, Mr. Steinholt also opines on whether or not Big Lots' stock traded in an efficient market during the Class Period.[38] As part of that analysis, Mr. Steinholt analyzed the five *Cammer* factors and the three *Krogman* factors. With respect to the fifth *Cammer* factor, Mr. Steinholt performed an event study purportedly designed to test whether the market quickly and fully integrated new information concerning Big Lots into the market price of the company's stock.

62. The first four *Cammer* factors and the three *Krogman* factors are insufficient to show market efficiency because they do not address the central question at issue: whether Big Lots' stock price fully and quickly integrated all publicly available information during the Class Period. These factors either measure aspects of the market structure of Big Lots (*e.g.*, trading volume, bid-ask spread, number of analysts following Big Lots) or some aspects of Big Lots itself (*e.g.*, Form S-3 eligibility).[39] Certain market structure characteristics may be consistent with a stock traded in an efficient market, but these characteristics by themselves do not prove that Big Lots traded in an efficient market. For example, a low bid-ask spread has no bearing on whether Big Lots' stock quickly and fully reflected all publicly available

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[38] Steinholt report, ¶ 17.
[39] Steinholt report, ¶¶ 20, 23, 26, 29.

information during the Class Period. As a result, these factors cannot support Mr. Steinholt's conclusions that Big Lots' stock was traded in an efficient market during the Class Period.

63. Regarding the fifth *Cammer* factor, the goal of Mr. Steinholt's event study is to provide empirical evidence of a cause-and-effect relationship between unexpected, value-relevant and company-specific information and stock price movement. As explained in *Cammer v. Bloom*, this "cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price… is the essence of an efficient market and the foundation for the fraud on the market theory."[40]

64. A scientific analysis of this relationship requires one to (1) identify events that could have conveyed unexpected, value-relevant information to the market, (2) analyze these events and determine whether the mix of information associated with each event was indeed unexpected and value-relevant, (3) use this analysis of the information to form hypotheses concerning expected stock price movements on these days, and (4) test these hypotheses against the actual stock price movement on the relevant days. In other words, a proper analysis of the cause-and-effect relationship identifies a set of events, develops an ex-ante hypothesis to test for each event, and performs a statistical test of each hypothesis. Mr. Steinholt's analysis fails to meet this standard. As a result, Mr. Steinholt's event study analysis is unscientific, flawed, and does not support the conclusion that Big Lots' stock price quickly and fully integrated company-specific information.

A. Overview of Mr. Steinholt's analysis of the cause-and-effect relationship between company-specific news and stock price movements

65. To analyze the cause-and-effect relationship between company-specific information and Big Lots' stock price movements, Mr. Steinholt uses six days in 2012 on which financial releases occurred. Specifically, Mr. Steinholt considered February 2, 2012, March 2, 2012, May 23, 2012, December 4, 2012, and the two alleged corrective disclosure dates: April 23, 2012 and August 23, 2012.[41]

66. Regarding these dates, Mr. Steinholt simply states that "[f]inancial releases generally provide new information to investors, and therefore they have a greater likelihood of

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[40] Steinholt report, ¶ 31.
[41] Steinholt report, ¶ 33.

materially altering the public mix of information."[42] He also adds that "[i]t should be noted that just because the Company announced earnings does not mean that one would necessarily expect there to be a statistically significant price increase or decrease because the totality of the information disclosed could be interpreted by the market as being neutral."[43]

67. Then, he uses the results of his regression analysis to determine the statistical significance of the residual returns on these days. That analysis shows that the residual return on May 23, 2012 is not statistically significant and that the five other residual returns are statistically significant.[44]

68. For the two alleged corrective disclosure dates, Mr. Steinholt also reported some of the pieces of information released and opined that, for each disclosure date, the disclosures that he considered were "clearly new and material adverse value-relevant information that, in an efficient market, would be expected to result in negative price declines."[45] For these two days, the residual stock price returns on the impact days were negative and statistically significant.[46]

69. Mr. Steinholt also argues that it is very unlikely that five out of six days (or even three out of four days in the Class Period) have statistically significant price movement only by chance.[47]

B. Mr. Steinholt's analysis of the cause-and-effect relationship for the non-corrective disclosure dates is flawed and unscientific

70. To demonstrate whether a company's stock price quickly and fully integrated the informational content of a company-specific event, it is necessary to develop a hypothesis as to whether the stock price should have reacted to the event, and, if a reaction is expected, the direction of the price change. This ex-ante hypothesis may then be tested by comparing the predicted price change to the statistical significance and direction of residual stock price returns. Because Mr. Steinholt failed to develop ex-ante hypotheses for February 2, 2012, March 2, 2012, May 23, 2012, and December 4, 2012, his conclusions are unreliable.

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[42] Steinholt report, ¶ 37.
[43] Steinholt report, fn. 39.
[44] Steinholt report, Exhibit E.
[45] Steinholt report, ¶¶ 41, 44.
[46] Steinholt report, Exhibit E.
[47] Steinholt report, ¶ 37.

71. For each of these days, developing an ex-ante hypothesis regarding the unexpected nature, value relevance, and expected price impact of the information released, including the expected direction of the stock price change, is important for testing whether the information released was fully and quickly integrated by the stock price. The stock price could have reacted in a way that is inconsistent with the expected impact, in an efficient market, of the news released on a particular day. For example, the stock price could show a statistically significant price decrease on a day for which an analysis of the information released indicates that the stock price should have increased or not reacted. Conversely, the stock price could show no reaction on a day for which value-relevant information was released. Without an ex-ante hypothesis, it is not possible to conclude whether the stock price reacted in an efficient manner to the disclosure of specific information.

72. Academic literature supports the ex-ante hypothesis methodology. A. Craig MacKinlay in his article "Event Studies in Economics and Finance" develops an event study methodology to investigate whether earnings announcements provide information to the marketplace.[48] MacKinlay emphasizes that

> "[t]o facilitate the examination of the impact of the earnings announcement on the value of the firm's equity, it is essential to posit the relation between the information release and the change in the value of equity…. If the earnings disclosures have information content, higher than expected earnings should be associated with increases in value of the equity and lower than expected earnings with decreases."[49]

73. Therefore, MacKinlay explains, to analyze whether stock prices reacted to certain events in a manner consistent with those events having provided information to the marketplace, it is essential to develop an ex-ante hypothesis as to how the stock price should have reacted to the events, including a prediction regarding the direction of the price impact. It is worth noting that this methodology was specifically designed to test whether or not the market is reacting to specific events.

74. If the stock of a company is traded in an efficient market, then positive new and value-relevant information about this company should be associated with a statistically

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[48] A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35 (March 1997), p. 16.
[49] A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35 (March 1997), p. 16.

significant stock price increase. In other words, a specific behavior is expected from a stock traded in an efficient market, and this is the basis for the test of market efficiency. By defining whether the events at issue should be good news, bad news, or irrelevant for investors, one can test whether the stock price reaction to these events is consistent with market efficiency. This framework has been applied in the academic literature studying the price reaction to different types of events that are expected to have an impact on the value of a firm. That literature generally concerns whether a specific mechanism can explain how certain events are interpreted by the market. To explore that question, academics have generally developed ex-ante hypotheses, based on these mechanisms, regarding whether the market should consider certain events to be good news, bad news, or irrelevant. Those hypotheses have then been tested. For example, Eugene Fama, in his article "Efficient Capital Markets: II," mentions that some ex-ante hypotheses were developed regarding whether some events such as unexpected dividends or issuance of common stock should be irrelevant, good news, or bad news for the market. Then, event study results were used to test these hypotheses.[50] Similarly, in Bonnier *et al*. (1989), the authors test an ex-ante hypothesis regarding whether management change in distressed firms benefits shareholders.[51]

75. With respect to the non-corrective disclosure days, Mr. Steinholt does not take any position regarding the expected impact of the information released. To explain his focus on the four non-corrective disclosure dates that he analyzed, Mr. Steinholt merely states that "[f]inancial releases generally provide new information to investors, and therefore they have a greater likelihood of materially altering the public mix of information."[52] Mr. Steinholt simply offers this generality and does not attempt to determine whether the financial releases on the non-corrective disclosure days that he chose did or did not materially alter the public mix of information. He does not tie his statements to the facts of this matter.

76. Mr. Steinholt also mentions that the presence of an "earnings [announcement] does not mean that one would necessarily expect there to be a statistically significant price increase or decrease because the totality of the information disclosed could be interpreted by the market as being neutral."[53] In other words, he states that a company's stock price may or

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[50] Eugene Fama, "Efficient Capital Markets: II," *The Journal of Finance*, Vol. 46, No. 5 (Dec. 1991), p. 1600.
[51] Karl-Adam Bonnier and Robert F. Bruner, "An Analysis of Stock Price Reaction to Management Change in Distressed Firms," *Journal of Accounting and Economics*, Vol. 11 (1989), pp. 100-101.
[52] Steinholt report, ¶ 37.
[53] Steinholt report, fn.39.

may not react to financial releases. This statement highlights the importance of determining whether a specific financial release contains information that is both unexpected and value-relevant. Without determining how the stock price should have reacted based on the informational content of an event, it is not possible to determine whether the stock price reacted in an efficient manner.

77. For example, Mr. Steinholt found that on May 23, 2012, Big Lots' stock price did not react in a statistically significant manner to the financial information released.[54] On that day, Big Lots provided financial results regarding the first quarter of 2012, updated its financial guidance for fiscal year 2012, provided guidance for the second quarter of 2012, and held an earnings conference call with analysts, among other elements of information released.[55] Mr. Steinholt does not explain how the mix of information released on that day was expected to be, or not to be, value-relevant for investors and, therefore, he cannot conclude that the lack of stock price reaction is consistent with the behavior of a stock trading in an efficient market. Similarly, for the other three non-corrective disclosure days, he does not explain why a statistically significant stock price decline or increase represents an efficient reaction to the information released on those days. Without analyzing the mix of information released and specifying an ex-ante hypothesis regarding the direction of the price impact, market efficiency cannot be tested.

78. Mr. Steinholt appears to understand the framework that I described above to analyze the cause-and-effect relationship between company-specific information and stock price movements. He refers to this methodology in paragraph 38 of his expert report. However, he adds that developing a hypothesis regarding whether specific information will cause an observable stock price movement is often subjective and, therefore, the analysis that he performed is preferable.[56] This argument lacks merit in many respects.

79. First, if Mr. Steinholt could not objectively develop an ex-ante hypothesis for certain days, then his conclusion should have been that those days cannot be used to determine whether Big Lots' stock price fully and quickly reflected company-specific information, rather than concluding that his methodology is preferable and objective. If it was not possible

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[54] Steinholt report, Exhibit E.
[55] "Big Lots Reports First Quarter Adjusted EPS From Continuing Operations of $0.68 Per Diluted Share," PR Newswire, May 23, 2012.
[56] Steinholt report, ¶ 38.

to develop an expectation regarding whether the information released on a certain day should have caused an observable stock price movement, then there is no reference to understand whether a stock price movement, or the absence of a stock price movement, is consistent with the behavior of a stock traded in an efficient market.

80. Second, Mr. Steinholt does not provide any evidence that he tried to develop an ex ante hypothesis for these four days and does not explain why he could not reach an objective conclusion regarding the expected price impact of the information released on these four days. Mr. Steinholt continues to make general statements that are unsupported and are not connected to the facts in this matter.

81. Lastly, as discussed further below, Mr. Steinholt appears to provide an ex-ante hypothesis for the two alleged corrective disclosure days. However, he does not explain how it is possible to develop an objective opinion regarding the expected price impact of the news released for those two days but not for the other four days he analyzed. Without more detail, Mr. Steinholt's own subjectivity seems to be the factor that determined which days can be analyzed using an ex-ante hypothesis.

C. The use of the alleged corrective disclosure dates to analyze the cause-and-effect relationship is inappropriate

82. In addition to the four dates discussed above, Mr. Steinholt also uses the dates of the two alleged corrective disclosures, April 23, 2012 and August 23, 2012, to analyze the cause-and-effect relationship between the release of company-specific information and Big Lots' stock price.[57] However, using these days is fundamentally unscientific and inconsistent with the ex-ante hypothesis framework.

83. Unlike the four other dates, Mr. Steinholt does purport to have developed an ex-ante hypothesis of the sort he argues is inappropriately subjective in certain circumstances with respect to these two dates. Based on his analysis, he concludes that "both of these events relate to disclosures of new and material adverse value-relevant information that, in an efficient market, would be expected to result in negative price declines."[58]

[57] Steinholt report, ¶ 39.
[58] Steinholt report, ¶ 39.

84. However, the analysis performed by Mr. Steinholt for these days represents an ex-post analysis and does not follow the methodology to develop an ex-ante hypothesis. In this methodology, it is critical to evaluate the stock price impact of the information released on a certain day without knowing the actual price movement. This ensures that the expert's assessment of the expected price impact of the information released on a specific day is objective and not biased by the knowledge of the actual price movement.

85. In the context of securities litigation, alleged corrective disclosure dates are typically associated with significant stock price declines. Otherwise, Plaintiffs would have little incentive to file a lawsuit since expected damages would be insignificant. Therefore, it is likely that Mr. Steinholt knew before starting his analysis that April 23, 2012 and August 23, 2012 were associated with large stock price declines. As a result, the analysis performed by Mr. Steinholt for these two days is ex-post.

VII. Mr. Steinholt fails to provide any evidence of price inflation due to the alleged misstatements.

86. As explained above, there are nine separate days on which Plaintiffs allege misrepresentations.[59] The statistical analysis provided by Mr. Steinholt does not demonstrate that the alleged misstatements caused a positive and statistically significant price return. Mr. Steinholt, therefore, cannot point to such analysis to show that inflation was created by those alleged misstatements.

87. According to the regression analysis presented in Exhibit E of Mr. Steinholt's expert report, there is no evidence of a positive and statistically significant stock price increase that could be associated with the alleged misstatements. Exhibit 4 summarizes the results of Mr. Steinholt's analysis for the relevant days and shows that only the impact dates associated with the alleged misstatements made on March 2, 2012 and April 23, 2012 (the date of the first alleged corrective disclosure) have a statistically significant residual stock price return at the 95% confidence interval level. Yet, the residual returns were negative and were associated with stock price decreases, not increases. Further, Mr. Steinholt describes a theory of price maintenance and appears to use it to justify his focus only on stock price reactions upon the

[59] Opinion and Order.

release of the alleged corrective disclosures.[60] Such a theory implies that the alleged misrepresentations were considered by the market to be confirmatory statements that did not provide new and value-relevant information to the market.

88. However, Mr. Steinholt does not provide any evidence or analysis showing that this price maintenance theory is applicable to the facts in this case and can explain how inflation was created. As explained above, he does not define the but-for world and does not explain how he would estimate investors' reactions to the but-for disclosures. As a result, Mr. Steinholt does not show how inflation was created and does not establish that a price maintenance theory is applicable in this matter.

Executed this 28th day of July 2016

Paul A. Gompers

[60] Steinholt report, ¶ 54.

Exhibit 1
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ACADEMIC POSITIONS

2000–present HARVARD BUSINESS SCHOOL BOSTON, MA
Eugene Holman Professor of Business Administration. Research interests include venture capital, private equity, entrepreneurial finance, institutional investors, corporate governance, optimal security design, dynamic capital structure, long-run performance of firms, and sources of financing for start-up businesses.

1998–2000 HARVARD BUSINESS SCHOOL BOSTON, MA
Associate Professor of Business Administration.

1995–1998 HARVARD BUSINESS SCHOOL BOSTON, MA
Assistant Professor of Business Administration.

1993–1995 UNIVERSITY OF CHICAGO CHICAGO, IL
Assistant Professor of Finance and Policy at the Graduate School of Business. Created new course on the financing of start-up companies.

1995–present NATIONAL BUREAU OF ECONOMIC RESEARCH CAMBRIDGE, MA
Research Associate. Appointed as an NBER affiliate in corporate finance.

EDUCATION

1989–1993 HARVARD UNIVERSITY CAMBRIDGE, MA
Received Ph.D. in Business Economics, June 1993.

1987–1989 OXFORD UNIVERSITY OXFORD, UK
Graduated *summa cum laude* with a M.Sc. in economics, July 1989.

1982–1987 HARVARD COLLEGE CAMBRIDGE, MA
Graduated *summa cum laude* with an A.B. in biology.

PUBLICATIONS

Books

The Venture Capital Cycle, (MIT Press, Cambridge) October 1999. (Joint with Josh Lerner.) First Edition.

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The Money of Invention, (Harvard Business School Press, Boston) November 2001. (Joint with Josh Lerner.)
Entrepreneurial Finance: A Casebook, (John Wiley, New York) December 2001. (Joint with William Sahlman.)
The Venture Capital Cycle, (MIT Press, Cambridge) October 1999. (Joint with Josh Lerner.) Second Edition. 2004.

Articles in Refereed Journals

"Optimal Investment, Monitoring, and the Staging of Venture Capital," *Journal of Finance* 50, 1461-1489. December 1995. Reprinted in Michael Wright and Ken Robbie, editors, Venture Capital (International Library of Management) (Aldershot: Dartmouth Publishing, 1997.)
"Grandstanding in the Venture Capital Industry," *Journal of Financial Economics* 42, 133–156. July 1996.
"The Rise and Fall of Venture Capital," Business and Economic History 23, 1–24. Winter 1994. Awarded Newcomen Prize essay for best paper in business history.
"The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements," *Journal of Law and Economics* 39, 463–498. October 1996. (with Josh Lerner.)
"Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure Capital-backed Companies." *Journal of Finance* 52, 1791–1821. December 1997. (with Alon Brav.) Awarded the Smith-Breeden Distinguished Paper Award.
"Venture Capital Growing Pains: Should the Market Diet?" *Journal of Banking and Finance* 22, 1089–1104. August 1998.
"An Analysis of Compensation in the US Venture Capital Partnership," *Journal of Financial Economics* 51, 3–44. January 1999. (with Josh Lerner.)
"Venture Capital Distributions: Short-Run and Long-Run Reactions," *Journal of Finance* 53, 2161–2184. December 1998. (with Josh Lerner.)
"Conflict of Interest in the Issuance of Public Securities: Evidence from Venture Capital," *Journal of Law and Economics* 42, 1-28. April 1999. (with Josh Lerner.)
"What Drives Venture Capital Fundraising?" *Brookings Proceedings on Microeconomic Activity,* 149-192. August 1998. (with Josh Lerner.)
"Money Chasing Deals? The Impact of Fund Inflows on Private Equity Valuations," *Journal of Financial Economics* 55, 281-325. February 2000. (with Josh Lerner.)
"Is the Abnormal Return Following Equity Issuances Anomalous?" *Journal of Financial Economics* 56, 209–250. May 2000. (with Alon Brav and Chris Geczy.)
"Institutional Investors and Equity Prices," *Quarterly Journal of Economics* 114, 229–260. 2001. (with Andrew Metrick.)
"The Venture Capital Revolution," *Journal of Economic Perspectives* 15, 145–168. Spring 2001. (with Josh Lerner.)
"Who Underreacts to Cash Flow News?" *Journal of Financial Economics* 66, 409–462. 2002. (with Randy Cohen and Tuomo Vuolteenaho.)
"The Role of Lock-ups in Initial Public Offerings Provisions," *Review of Financial Studies* 16, 1–29. Spring 2003. (with Alon Brav.)
"Corporate Governance and Equity Prices," *Quarterly Journal of Economics* 118, 107-156. February 2003. (with Joy Ishii and Andrew Metrick.)
"The Really Long-Run Performance of Initial Public Offerings: Evidence from the Pre-Nasdaq Period, 1933–1972," *Journal of Finance* 56, 1355–1392. August 2003. (with Josh Lerner.)
"The Determinants of Board Structure and Function in Entrepreneurial Firms," *Journal of Law and Economics* 46, 569–598. October 2003. (with Malcolm Baker.)

Exhibit 1
Paul A. Gompers CV

"Entrepreneurial Spawning: Corporations and the Genesis of New Ventures, 1986–1999," *Journal of Finance* 60, 577-614. April 2005. (with Josh Lerner and David Scharfstein.)
"Large Blocks of Stock: Prevalence, Size, and Measurement," *Journal of Corporate Finance* 12, 594-618. June 2006. (with Rudiger Fahlenbrach, Jennifer Dlugosz, and Andrew Metrick.)
"Venture Capital Investment Cycles: The Impact of Public Markets," *Journal of Financial Economics*, 1–23. 2008. (with Anna Kovner, Josh Lerner, and David Scharfstein.)
"Specialization and Success: Evidence from Venture Capital," *Journal of Economic and Management Strategy* 18, 817–845. 2009. (with Anna Kovner, Josh Lerner, and David Scharfstein.)
"Extreme Governance: An Analysis of Dual-Class Firms in the United States," *Review of Financial Studies* 23, 1051–1088. 2010. (with Joy Ishii and Andrew Metrick.)
"Performance Persistence in Entrepreneurship and Venture Capital," *Journal of Financial Economics* 96, 18–32. 2010. (with Anna Kovner, Josh Lerner, and David Scharfstein.)
"Buy Local? The Geography of Successful Venture Capital Expansion," *Journal of Urban Economics* 67, 90–102. 2010. (with Henry Chen, Anna Kovner, and Josh Lerner.)
"The Cost of Friendship," forthcoming in the *Journal of Financial Economics*, available online 22 January 2016. (with Vladimir Mukharlyamov and Yuhai Xuan.)
"Gender Effects in Venture Capital." Revise and resubmit at *Management Science*. (with Vladimir Mukharlyamov, Emily Weisburst, and Yuhai Xuan.)
"What Do Private Equity Investors Do? Evidence from a Global Survey," forthcoming in *Journal of Financial Economics*. (with Steve Kaplan and Vladimir Mukharlyamov.)

Other Articles

"Venture Capital and the Creation of Public Companies: Do Venture Capitalists Really Bring More than Money?" *Journal of Private Equity* 1, 15-32. Fall 1997. (with Josh Lerner.)
"Risk and Reward in Private Equity Investments: The Challenge of Performance Assessment," *Journal of Private Equity* 1, 5-12. Winter 1997. (with Josh Lerner.)
"Resource Allocation, Incentives, and Control: The Importance of Venture Capital in Financing Entrepreneurial Firms," *Entrepreneurship, SMEs, and the Macroeconomy* (Cambridge University Press, Cambridge), 206-238. February 1997.
"Venture Capital," *The Handbook of Technology Management* (Richard Dorf, Editor-in-Chief). January 1997. (with Josh Lerner.)
"The Determinants of Corporate Venture Capital Success: Organizational Structure, Incentives, and Complementarities," NBER Conference Volume on Concentrated Corporate Ownership, 17-54. September 1998.
"Capital Formation and Investment in Venture Markets: An Assessment of Market Imperfections," *The Economic Evaluation of Technological Change* (Richard Spivack, Editor). June 1998.
"Corporations and the Financing of Innovation: The Corporate Venturing Experience," *The Atlanta Federal Reserve Bank Conference Volume*, 1-17. 2002.
"Venture Capital and Private Equity," *The Handbook of Corporate Finance* (Espen Eckbo, Editor) (North-Holland Press, New York). 2002.
"Short-Term America Revisited? Boom and Bust in the Venture Capital Industry and the Impact on Innovation," *Innovation Policy and the Economy* 3, 1-28. March 2002. (with Josh Lerner.)
"Venture Capital," Chap. D5 of *The Handbook of Modern Finance* (Dennis Lougue, Editor). 2007. (with Josh Lerner.)
"Equity Financing," *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and* introduction (Zoltan Acs and David B. Audretsch, Editor). 2010. (with Josh Lerner.)
"The Role of Venture Capitalists in the Acquisition of Private Companies." In *Research Handbook on International Banking and Governance,* edited by James Barth, Chen Lin, and Clas Wihlborg. Cheltenham, UK: Edward Elgar Publishing, 2012. (with Yuhai Xuan.)

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Paul A. Gompers CV

Working Papers

"What Do Private Equity Firms Say They Do?" NBER Working Paper No. w21133 (with Steven N. Kaplan and Vladimir Mukharlyamov)

"More than Money: Venture Capitalists on Boards." March 2015. (with Natee Amornsiripanitch and Yuhai Xuan.)

"To Err is Human, To Forgive is a Mistake: Evidence from Venture Capital Hiring," December 2013 (with Vladimir Mukharlyamov and Yuhai Xuan.)

"Bridge Building in Venture Capital: Evidence from Acquisitions of Venture Capital-backed Companies," December 2011. Revise and resubmit at *Review of Financial Studies* (with Yuhai Xuan.)

"Reputation and Contractual Flexibility: Evidence from Venture Capital Distribution Pricing Policies," August 2011. (with Timothy Dore and Andrew Metrick.)

"Why Experienced Venture Capitalists Leave Money on the Table: Evidence from Initial Public Offerings," July 2009. (with Alon Brav and Tim Dore.)

"Institutions, Capital Constraints and Entrepreneurial Firm Dynamics: Evidence from Europe," November 2006. (with Mihir Desai and Josh Lerner.)

"Skill vs. Luck in Entrepreneurship and Venture Capital: Evidence from Serial Entrepreneurs," December 2006. (with Anna Kovner, Josh Lerner, and David Scharfstein.)

"The Role of Venture Capitalists in the Acquisition of Private Companies," October 2005. (with Yuhai Xian.)

"Incentives vs. Control: An Analysis of U.S. Dual-class Companies," April 2004. (with Andrew Metrick and Joy Ishii.)

"Ownership and Control in Entrepreneurial Firms: An Examination of Convertible Securities in Venture Capital Investment," January 2000.

"An Analysis of Executive Compensation, Ownership, and Control in Entrepreneurial Firms," May 2000. (with Malcolm Baker.)

Opinion — Editorials

"This Tax Cut Will Pay Dividends," *Wall Street Journal,* August 13, 2002. (with Andrew Metrick and Jeremy Siegel.)

Projects in Process

- "The Evolution of Ownership and Control in Entrepreneurial Firms." (with Malcolm Baker.)
- "Dual Class IPOs." (with Malcolm Baker.)
- "Pre-public Financing in Entrepreneurial Ventures."
- "Institutional Ownership and Corporate Governance." (with Andrew Metrick and Joy Ishii.)
- "The Dynamics of Global Entrepreneurship." (with Mihir Desai and Josh Lerner.)
- "The Determinants of Venture Capital Acquisitions." (with Yuhai Xuan.)
- "The Determinants of Entrepreneurial Success." (with Anna Kovner, Josh Lerner, and David Scharfstein.)
- "Risk and Return in Private Equity." (with Leslie Jeng, Josh Lerner, and Andrew Metrick.)
- "Corporate Governance through Time." (with Martijn Cremers, Allen Ferrell, and Andrew Metrick.)

COURSE MATERIALS

Cases

- "Abraaj Capital and Acibadem Healthcare Invesetment (A)." Harvard Business School Case 214-021.

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- "Abraaj Capital and Acibadem Healthcare Invesetment (B)." Harvard Business School Case 214-022.
- "Advantage Partners: Dia Kanri (A)." Harvard Business School Case 214-016.
- "Advantage Partners: Dia Kanri (B)." Harvard Business School Case 214-017.
- "The Advent Israel Venture Capital Program." Harvard Business School Case 298–072.
- "ALWAYSi." Harvard Business School Case 201–075.
- "APV Technology Partners II, L.P." Harvard Business School Case 298–048.
- "Ardian: The Sale of Diana." Harvard Business School Case 215-033.
- "Bain Capital: Outback Steakhouse." Harvard Business School Case 212-087.
- "Bang Networks, Inc." Harvard Business School Case 201–074.
- "BioTransplant, Inc.: Initial Public Offering, January 1996." Harvard Business School Case 297–095.
- "Cachet Technologies." Harvard Business School Case 200–031.
- "Cambridge Technology Partners: 1991 Start Up." Harvard Business School Case 298–044.
- "Cambridge Technology Partners: Corporate Venturing (August 1996)." Harvard Business School Case 297–033.
- "Car Wash Partners, Inc." Harvard Business School Case 299–034.
- "Charles River Velocity." Harvard Business School Case 201–092.
- "Charter Communication Bankruptcy." Harvard Business School Case 211-035.
- "Dell Ventures." Harvard Business School Case 200–062.
- "Digital Everywhere, Inc." Harvard Business School Case 298–099.
- "edocs, Inc. (A)." Harvard Business School Case 200–015.
- "edocs, Inc. (B-1): Kevin Laracey." Harvard Business School Case 200–020.
- "edocs, Inc. (B-2): Jonathon Guerster." Harvard Business School Case 200–021.
- "Efficient Market Services: August 1993 (A)." Harvard Business School Case 298–009.
- "Efficient Market Services: August 1993 (B1), EMS Management." Harvard Business School Case 298–010.
- "Efficient Market Services: August 1993 (B2), Comdisco Ventures." Harvard Business School Case 298–011.
- "Elliot Lebowitz." Harvard Business School Case 297–094.
- "Endeca: New Growth Opportunities." Harvard Business School Case 206–041.
- "First Mark Capital." Harvard Business School Case 212-041.
- "Fitzpatrick Hotel Group (A)." Harvard Business School Case 298–002.
- "Fitzpatrick Hotel Group (B1): Niall Carroll." Harvard Business School Case 298–003.
- "Fitzpatrick Hotel Group (B2): Paddy Fitzpatrick." Harvard Business School Case 298–004.
- "Founders Fund." Harvard Business School Case 211-040.
- "Genset Initial Public Offering (A)." Harvard Business School Case 297–096.
- "Genset Initial Public Offering (B)." Harvard Business School Case 297–097.
- "Genset: 1989." Harvard Business School Case 298–070.
- "Global Digital Utilities Corp." Harvard Business School Case 297–065.
- "Globant: Going Public." Harvard Business School Case 215-021.
- "Harrah's Entertainment LBO." Harvard Business School Case13-054.
- "HgCapital and the Visma Transaction: (A)." Harvard Business School Case 214-018.
- "HgCapital and the Visma Transaction: (B)." Harvard Business School Case 214-019.
- "HgCapital and the Visma Transaction: (C)." Harvard Business School Case 214-020.
- "Honest Tea." Harvard Business School Case 201–076.
- "Hudson Manufacturing." Harvard Business School Case 203–064.
- "Knightsbridge Advisers, Inc." Harvard Business School Case 296–054.
- "Knoll Furniture: Going Public." Harvard Business School Case 202–114.
- "MSE, Inc. Privatization: August 1997." Harvard Business School Case 298–135.

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- "MSE, Inc. Privatization: August 1997 (Abridged)." Harvard Business School Case 298–136.
- "New Oriental." Harvard Business School Case.
- "New York Bagel: Hungary, April 1994." Harvard Business School Case 297–078.
- "NSK Software Technologies Ltd." Harvard Business School Case 298–071.
- "Ocular." Harvard Business School Case 202–118.
- "Pet Doctors: 1999." Harvard Business School Case 200–016.
- "The Prague Post." Harvard Business School Case 299–033.
- "Private Equity Finance Vignettes: 2016." Harvard Business School Case 216-005.
- "Private Equity Vignettes: 2014." Harvard Business School Case 213-026.
- "Sarvega." Harvard Business School Case 204–137.
- "Shenzhen Capital Group: A Pioneer in China's VC Industry" Harvard Business School Case 211-029.
- "Sky Air, Inc." Harvard Business School Case 297–110.
- "Torrent Systems." Harvard Business School Case 298–084.
- "Tutor Time (A)." Harvard Business School Case 297–064.
- "Tutor Time (B)." Harvard Business School Case 297–074.
- "United Capital Partners (A)." Harvard Business School Case 213-044.
- "United Capital Partners (B)." Harvard Business School Case 213-045.
- "Venture Capital in Ireland: Getting Their ACT Together." Harvard Business School Case 298–001.
- "Vueling Airlines." Havard Business School Case.
- "Xedia and Silicon Valley Bank (A)." Harvard Business School Case 298–119.
- "Xedia and Silicon Valley Bank (B1): The Bank's Perspective." Harvard Business School Case 298–120.
- "Xedia and Silicon Valley Bank (B2): The Company's Perspective." Harvard Business School Case 298–121.
- "Xedia and Silicon Valley Bank (C): The Final Agreement." Harvard Business School Case 298–122.
- "ZEFER: November 1998." Harvard Business School Case 299–032.

Teaching Notes

- "Advent Israel Venture Capital Program TN." Harvard Business School Teaching Note 299–054.
- "APV Technology Partners II, L.P. TN." Harvard Business School Teaching Note 299–053.
- "Beta Golf." Harvard Business School Teaching Note 202–062.
- "BioTransplant Inc.: Initial Public Offering, January 1996 TN." Harvard Business School Teaching Note 299–055.
- "Cachet Technologies." Harvard Business School Teaching Note 202–068.
- "Cambridge Technology Partners —1991 Start Up TN." Harvard Business School Teaching Note 299–057.
- "Cambridge Technology Partners: Corporate Venturing (August 1996) TN." Harvard Business School Teaching Note 299–056.
- "Carlton Polish Co." Harvard Business School Teaching Note 202–076.
- "Car Wash Partners, Inc. TN." Harvard Business School Teaching Note 299–058.
- "Contracting and Control in Venture Capital." Harvard Business School Note 298–067.
- "Dell Ventures." Harvard Business School Teaching Note 202–072.
- "Digital Everywhere, Inc. TN." Harvard Business School Teaching Note 299–059.
- "edocs, Inc. Series." Harvard Business School Teaching Note 202–064.
- "Elliot Lebowitz TN." Harvard Business School Teaching Note 299–060.
- "Emergence of Silicon Wadi." Harvard Business School Note 204–156.
- "Fenchel Lampshade Company." Harvard Business School Teaching Note 202–063.

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Paul A. Gompers CV

- "Efficient Market Services: August 1993 Series TN." Harvard Business School Teaching Note 299–061.
- "Fitzpatrick Hotel Group Series TN." Harvard Business School Teaching Note 299–062.
- "Genset: 1989 TN." Harvard Business School Teaching Note 299–063.
- "Genset Initial Public Offering (A) & (B) TN." Harvard Business School Teaching Note 299–064.
- "Global Digital Utilities Corporation TN." Harvard Business School Teaching Note 299–065.
- "HIMSCORP, Inc." Harvard Business School Teaching Note 202–073.
- "Honest Tea." Harvard Business School Teaching Note 202–069.
- "Introduction to Entrepreneurial Finance." Harvard Business School Note 298–061.
- "Introduction to Private Equity Finance." Harvard Business School Note 213-026.
- "Knightsbridge Advisers, Inc. TN." Harvard Business School Teaching Note 299–066.
- "Knot, The." Harvard Business School Teaching Note 202–070.
- "MSE, Inc. Privatization: August 1997 & MSE, Inc. Privatization: August 1997 (Abridged) TN." Harvard Business School Teaching Note 299–067.
- "Nantucket Nectars." Harvard Business School Teaching Note 202–074.
- "New York Bagel: Hungary, April 1994 TN." Harvard Business School Teaching Note 299–068.
- "A Note on Angel Financing." Harvard Business School Note 298–083.
- "A Note on LBO Capital Structure." Harvard Business School Note 213-091.
- "A Note on Franchising." Harvard Business School Note 297–108.
- "A Note on Government Sources of Financing for Small Businesses." Harvard Business School Note 298–015.
- "Note on Strategic Alliances, A." Harvard Business School Note 298–047.
- "A Note on the Internet." Harvard Business School Note 297–109.
- "A Note on Private Equity Exits." Harvard Business School Note 213-112.
- "A Note on the Venture Capital Industry." Harvard Business School Note 295–065.
- "A Note on Valuation in Entrepreneurial Ventures." Harvard Business School Note 298–082.
- "A Note on Valuation in Private Equity." Harvard Business School Note 213-034.
- "NSK Software Technologies Ltd. TN." Harvard Business School Teaching Note 299–069.
- "Parenting Magazine TN." Harvard Business School Teaching Note 202–065.
- "Penelope's Personal Pocket Phones TN." Harvard Business School Teaching Note 299–070.
- "Prague Post, The TN." Harvard Business School Teaching Note 299–071.
- "Private Equity Valuation in Emerging Markets." Harvard Business School Note 213-043.
- "Record Masters." Harvard Business School Teaching Note 202–075.
- "Penelope's Personal Pocket Phones." Harvard Business School Case 299–004.
- "Sky Air, Inc. TN." Harvard Business School Teaching Note 299–072.
- "Torrent Systems TN." Harvard Business School Teaching Note 299–073.
- "Tutor Time (A) TN." Harvard Business School Teaching Note 299–074.
- "Tutor Time (B) TN." Harvard Business School Teaching Note 299–078.
- "Venture Capital in Ireland: Getting Their ACT Together TN." Harvard Business School Teaching Note 299–075.
- "Xedia and Silicon Valley Bank Series TN." Harvard Business School Teaching Note 299–076.
- "ZEFER: November 1998 TN." Harvard Business School Teaching Note 299–077.

SEMINARS AND CONFERENCE PRESENTATIONS — Academic

American Economic Association: Annual Meeting, January 1995, "Optimal Investment, Monitoring, and the Staging of Venture Capital."

American Finance Association: Annual Meeting, January 1995, "An Analysis of Compensation in the U.S. Venture Capital Partnership."

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American Finance Association: Annual Meeting, January 1996, “Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies.”
American Finance Association: Annual Meeting, January 1999, “What Drives Venture Capital Fundraising.”
American Finance Association: Annual Meeting, January 2000, “An Analysis of Executive Compensation, Ownership, and Control in Entrepreneurial Firms.”
American Finance Association: Annual Meeting, January 2004, “Incentives vs. Control: An Analysis of U.S. Dual-class companies.”
American Finance Association: Annual Meeting, January 2015, “Cost of Friendship.”
American Finance Association: Annual Meeting, January 2015, “What Do Private Equity Firms (Say) They Do?”
American Law and Economics Association: Annual Meeting, May 1996, “The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements.”
Association of Financial Economists: Annual Meeting, January 2001, “The Determinants of Board Structure and Function in Entrepreneurial Firms.”
Association of Financial Economists: Annual Meeting, January 2006, “Skill vs. Luck: An Analysis of Serial Entrepreneurs.”
Arizona State University School of Business: Finance Seminar, December 1995, “Venture Capital Distributions: Short-Run and Long-Run Reactions.”
Boston University: Finance Seminar, December 1996, “Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies.”
Brandeis University: Entrepreneurship Conference, April 2014, “The Next Big Question in Entrepreneurship Research.”
Brookings Institute: Microeconomic Conference, June 1998, “What Drives Venture Fundraising?”
Business and Economic History: Annual Meeting, March 1994, “The Rise and Fall of Venture Capital.”
Center for Research on Security Prices: Biannual Meeting, March 1995, “Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies.”
Center for Research on Security Prices: Biannual Meeting, November 1994, “Venture Capital Distributions: Short-Run and Long-Run Reactions.”
Center for Economic and Policy Research: European Finance Conference on Financing Innovation, November 1998, “What Drives Venture Capital Fundraising?”
Columbia Law School: Law and Economics Seminar, November 1995, “An Analysis of Compensation in the U.S. Venture Capital Partnership.”
Columbia Law School: Law and Economics Seminar, November 1995, “The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements.”
Columbia Law School: Financing Innovation Conference, December 1997, “An Analysis of Covenants in Venture Capital Investments.”
Columbia University School of Business: Finance Seminar, January 1993, “Grandstanding in the Venture Capital Industry.”
Copenhagen Business School: Finance Seminar, May 1999, “An Analysis of Executive Compensation, Ownership, and Control in Closely Held Firms.”
Cornell Business School: Finance Seminar, October 2001, “Corporate Governance and Equity Prices.”
Federal Reserve Bank of Chicago: January 1994, “Optimal Investment, Monitoring, and the Staging of Venture Capital.”
Duke University Fuqua Business School: Finance Seminar, January 1993, “Grandstanding in the Venture Capital Industry.”

Georgetown Law School: April 2003, "Corporate Governance and Equity Prices."
Harvard Business School: Business History Seminar, December 2000, "The History of Silicon Valley."
Harvard Business School: Entrepreneurship Conference, December 2000, "The Really Long-run Performance of Initial Public Offerings."
Harvard Business School: Financial Decision and Control Workshop, July 1994, "Optimal Investment, Monitoring, and the Staging of Venture Capital."
Harvard Business School: Financial Decision and Control Workshop, July 1996, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."
Harvard Business School: Financial Decision and Control Workshop, July 1997, "Reputation and Conflict of Interest in the Issuance of Public Securities: Evidence from Venture Capital."
Harvard Business School: Financial Decision and Control Workshop, July 1998, "How are Large Institutions Different From Other Investors? Why Do These Differences Matter for Equity Prices and Returns?"
Harvard Business School: Finance Seminar, February 1994, "An Analysis of Compensation in the U.S. Venture Capital Partnership."
Harvard Business School: Finance Seminar, January 1993, "Grandstanding in the Venture Capital Industry."
Harvard Business School: Finance Seminar, October 1996, "Venture Capital Distributions: Short-Run and Long-Run Reactions."
Harvard Business School: Finance Seminar, May 1999, "An Analysis of CEO Compensation, Ownership, and Control in Closely Held Firms."
Harvard Business School: Finance Seminar, October 2011, "The Cost of Friendship."
Harvard Business School: Organizations and Markets Seminar, May 1999, "An Analysis of CEO Compensation, Ownership, and Control in Closely Held Firms."
Harvard Business School: Finance Seminar, November 2000, "The Venture Capital Revolution."
Harvard Business School: Finance Seminar, March 2006, "Skill vs. Luck: An Analysis of Serial Entrepreneurs."
Harvard Business School: Finance Seminar, December 2008, "Bridge Building in Venture Capital: Evidence from Acquisitions."
Harvard Business School: Finance Seminar, December 2014, "More than Money: Venture Capitalists on Boards."
Harvard Business School: Finance Seminar, February 2015, "What do Private Equity Firms (Say) They Do?"
Harvard Business School: Organizational Behavior Seminar, February 2012, "The Role of Social Ties in Venture Capital."
Harvard University Department of Economics: Workshop, December 1992, "Optimal Investment, Monitoring, and the Staging of Venture Capital."
Harvard University Department of Economics: Organizations Workshop, December 1996, "Reputation and Conflict of Interest in the Issuance of Public Securities: Evidence from Venture Capital."
Harvard University Department of Economics: Organizations Workshop, December 2002, "Entrepreneurial Spawning."
Harvard University Department of Economics: Organizations Workshop, December 1998, "Are the Hundred-Million-Dollar Managers Just Like Everyone Else? An Analysis of the Stock Ownership of Large Institutions."
Harvard University Department of Economics: Organizations Workshop, September 2003, "Entrepreneurial Spawning: Corporations and the Genesis of New Ventures, 1986–1999."
Hebrew University School of Business: Finance Seminar, March 1994, "An Analysis of Compensation in the U.S. Venture Capital Partnership."

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Hebrew University School of Business: Finance Seminar, March 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."
Hebrew University School of Business: Distinguished Lecture: December 2014, "What Do Private Equity Firms (Say) They Do?"
London School of Economics: Venture Capital Conference, October 1998, "How You Get There Matters: The Path Dependency of Executive Compensation in Closely Held Firms."
Massachusetts Institute of Technology: Organizations Workshop, March 1996, "The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements."
Massachusetts Institute of Technology and Harvard University: Public Finance Workshop, March 1998, "What Drives Venture Fundraising?"
National Bureau of Economic Research: Corporate Finance Group, April 1994, "Optimal Investment, Monitoring, and the Staging of Venture Capital."
National Bureau of Economic Research: Summer Institute, July 1994, "An Analysis of Compensation in the U.S. Venture Partnership Agreement."
National Bureau of Economic Research: Summer Institute, July 1995, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."
National Bureau of Economic Research: Summer Institute, July 1996, "Venture Capital Distributions: Short-Run and Long-Run Reactions."
National Bureau of Economic Research: Finance Series, December 1997, "Are the Hundred-Million-Dollar Managers Just Like Everyone Else? An Analysis of the Stock Ownership of Large Institutions."
National Bureau of Economic Research: Finance Series, November 1998, "How You Get There Matters: The Path Dependency of Executive Compensation in Closely-Held Firms."
National Bureau of Economic Research: Summer Institute, July 2001, "Corporate Governance and Equity Prices."
New York Federal Reserve Bank: May 2000, "The Determinants of Board Structure and Function in Entrepreneurial Firms."
New York University, Stern School of Business: Finance Seminar, January 1993, "Grandstanding in the Venture Capital Industry."
New York University, Stern School of Business: Finance Seminar, February 1999, "How You Get There Matters: The Path Dependency of Executive Compensation in Closely-Held Firms."
New York University, Stern School of Business: Finance Seminar, October 2006, "Skill vs. Luck: An Analysis of Serial Entrepreneurs."
Northwestern University, Kellogg Business School: Finance Seminar, January 1993, "Grandstanding in the Venture Capital Industry."
Northwestern University, Kellogg Business School: Finance Seminar, October 1997, "Money Chasing Deals? The Impact of Fund Inflows on Private Equity Valuations."
Norwegian School of Management: Finance Seminar, May 1999, "An Analysis of Executive Compensation, Ownership, and Control in Closely Held Firms."
Ohio State University: Finance Seminar, October 1998, "How You Get There Matters: The Path Dependency of Corporate Governance in Closely Held Firms."
Oxford University: Graduate Student Seminar, May 1989.
Oxford University: Finance Seminar, May 1999, "An Analysis of Executive Compensation, Ownership, and Control in Closely Held Firms."
Queens University (Kingston, Ontario) School of Business: Finance Seminar, November 1996, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."

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Rutgers University: Finance Seminar, October 1997, "Money Chasing Deals? The Impact of Fund Inflows on Private Equity Valuations."

Stanford University Graduate School of Business: Strategy Workshop, January 1993, "Grandstanding in the Venture Capital Industry."

Stanford University Graduate School of Business: Center for Economic and Political Research, March 1997, "The Valuation of Private Equity Investments."

Stanford University: Finance Seminar, October 2012, "The Cost of Friendship."

Stockholm Business School: September 2003, "Entrepreneurial Spawning: Corporations and the Genesis of New Ventures, 1986–1999."

Tel Aviv University School of Business: Finance Seminar, March 1994, "An Analysis of Compensation in the U.S. Venture Capital Partnership."

Tel Aviv University School of Business: Finance Seminar, March 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."

Tel Aviv University School of Business: Finance Seminar, December 2014, "What Do Private Equity Firms (Say) They Do?"

University of Arizona School of Business: Finance Seminar, December 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."

University of California at Berkeley, Haas School of Business: Finance Seminar, April 1993, "Grandstanding in the Venture Capital Industry."

University of California at Los Angeles: Finance Seminar, May 1997, "The Valuation of Private Equity Investments."

University of California at Los Angeles: Behavioral Finance Conference, April 1998, "Are the Hundred-Million-Dollar Managers Just Like Everyone Else? An Analysis of the Stock Ownership of Large Institutions."

University of Chicago Graduate School of Business: Finance Seminar, January 1993, "Grandstanding in the Venture Capital Industry."

University of Chicago Graduate School of Business: Information and Uncertainty Seminar, April 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."

University of Chicago Graduate School of Business: Finance Seminar, May 2006, "Skill vs. Luck: An Analysis of Serial Entrepreneurs."

University of Chicago Economics Department: Economic and Legal Organization Workshop, February 1994, "The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements."

University of Chicago Economics Department: Economic and Legal Organization Workshop, October 1997, "Reputation and Conflict of Interest in the Issuance of Public Securities: Evidence from Venture Capital."

University of Georgia School of Business: Finance Seminar, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."

University of Illinois School of Business: Finance Seminar, October 1994, "Optimal Investment, Monitoring, and the Staging of Venture Capital."

University of Michigan School of Business: Finance Seminar, November 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."

University of North Carolina School of Business: Finance Seminar, November 1995, "Venture Capital Distributions: Short-Run and Long-Run Reactions."

University of Pennsylvania Wharton School: Finance Workshop, March 1998, "Money Chasing Deals? The Impact of Venture Inflows of Private Equity Prices."

University of Rochester Simon School of Business: Finance Seminar, December 1996, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."

University of Rochester Simon School of Business: Organizations Seminar, February 1993, "Grandstanding in the Venture Capital Industry."
Virginia Tech University School of Business: Finance Seminar, October 1995, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies."
World Bank: Finance Seminar, May 1999, "An Analysis of CEO Compensation, Ownership, and Control in Closely Held Firms."
Western Finance Association: Annual Meeting, June 1994, "Optimal Investment, Monitoring, and the Staging of Venture Capital."
Western Finance Association: Annual Meeting, June 1995, "The Long-run Underperformance of Seasoned Equity Offerings Revisited."
Western Finance Association: Annual Meeting, June 1996, "The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements."
Western Finance Association: Annual Meeting, June 1997, "Reputation and Conflict of Interest in the Issuance of Public Securities: Evidence from Venture Capital."
Western Finance Association: Annual Meeting, June 1998, "How are Large Institutions Different from Other Investors? Why These Differences Matter for Equity Prices and Returns?"
Yale University, School of Management: Finance Seminar, January 1993, "Grandstanding in the Venture Capital Industry."

SPEECHES AND CONFERENCE PRESENTATIONS — Practitioner

Advanced Technology Program, National Institute for Standards and Technology and NBER Conference on Financing Innovation, June 1998.
Amsterdam Institute of Finance, October 1994, "Venture Capital and the Finance of Emerging Companies."
American Friends of the Technion, October 1998, "The Development of High Technology and Venture Capital in Israel."
AT&T Small Business Conference, April 1994, "Venture Capital: The Road Ahead."
Center for Economic Policy Research, Venture Capital Conference, March 1997, "The Pricing of Private Equity Investments: A Window on the Returns of Tomorrow."
Deloitte and Touche, May 2003, "Entrepreneurial Leadership."
Ernst and Young Silicon Valley Venture Capital Conference, 2002, "The Future of Venture Capital."
Ernst and Young Buyout Roundtable, 2002, "Corporate Governance and Private Equity."
Greenwich Roundtable, 2015, "Skill in Private Equity."
Harvard Business School Venture Capital Conference, December 1995, "Myth or Reality? The Long-Run Underperformance of Initial Public Offerings: Evidence from Venture and Nonventure-backed Companies" and "Venture Capital Distributions: Short-run and Long-run Reactions."
Harvard Business School Alumni Series, May 2000 and May 2003, "The Future of Private Equity."
Harvard Business School European Conference, June 2003, "European Private Equity."
Harvard Business School Global Alumni Conference, June 1998, "Consolidation Buy-outs."
Harvard Business School Global Alumni Conference, May 2001, "Venture Capital 2001: Boom or Bust?"]\
Harvard Business School Centennial Celebration, February 2010, "Private Equity at the Crossroads."
Harvard Business School Global Alumni Venture Capital Conference, May 2012, "New Venture Capital Models"
Harvard Business School Global Alumni Venture Capital Conference, October 2014, "Lessons from the Trenches."
Hambrecht and Quist, Post-Venture Forum, March 1999, "Venture and Post-Venture Opportunities: Insights from Research."

Institutional Limited Partner's Association, September 1997, "Risk and Return in Private Equity."
Institutional Limited Partner's Association, April 2002, "New Tools for Assessing Private Equity Valuation and Asset Allocation."
International Business Forum, June 1999, "Venture Capitalists and the Public Markets."
Investors' Press Alpha Roundtable, October 1996, "The Future of Private Equity."
Israel Business Forum, March 1994.
Israeli Venture Capital and High Technology Conference, 2002, "The Future of Venture Capital and Its Implication for Israel."
Japanese Private Equity Forum, July 1997, "Corporations and Venture Capital: Old and New Challenges."
Latin American Chamber of Commerce, February 1995, "Capital for Entrepreneurial Companies: A Look Ahead."
Massachusetts Public Pension Fund Investment Forum, October 1998, "Venture Capital: Investing in Start-up and Newly Public Firms."
National Venture Capital Association, March 2003, "The Future of Venture Capital."
Nova Pharmaceuticals, September 2009, "Venture Capital after the Downturn."
OPAL Institutional Investors Conference, December 2000, "The Future of Private Equity."
Rocky Mountain Venture Capital Association, March 2003, "Venture Capital: Challenges and Opportunities."
Russell Capital Private Equity Conference, March 1997, "The Pricing of Private Equity Investments: A Window on the Returns of Tomorrow."
Russell Capital Private Equity Conference, November 1998, "Advent Israel Venture Capital Program."
Salomon Smith Barney Private Equity Conference, March 2000, "The Future of Private Equity."
Salomon Smith Barney Consulting Group, March 2001, "Risk and Return in Private Equity."
Samsung Venture Capital Group, October 1997, "Corporations and Venture Capital: Old and New Challenges."
Seeking Alpha, March 2015, "What's Hot in Venture Capital Fundraising?"
Silicon Valley Bank, May 2003, "Venture Capital: Challenges and Opportunity."
SuperReturn Conference US, May 2009, "Insights from Private Equity Academic Research at the Harvard Business School."
SuperReturn Conference Europe, February 20011, "Insights from Private Equity Academic Research at the Harvard Business School."
SuperReturn Conference US, May 2013, "The Future of Private Equity."
University of Chicago Business Forum, May 1995, "The Next Ten Years in Venture Capital." (Organized and moderated panel.)
Venture Economics Venture Forum, November 1994, "The Venture Cycle." (Keynote Address.)
Venture Economics Venture Forum, November 1994, Panelist for IPO performance issues.
Venture Economics Venture Forum, November 1996, Plenary session speaker on venture capital returns.
VentureOne / Ernst and Young Venture Capital Conference, July 2002, "The Future of Venture Capital."
VentureOne / Ernst and Young Venture Capital Conference, July 2003, "The Future of European Venture Capital."
Young Presidents' Organization Conference, November 1998, "Entrepreneurial Opportunities in Crisis Situations."
Young Presidents' Organization Conference, January 2003, "The Future of Venture Capital."
Young Presidents' Organization Conference, January 2010, "New Models in Venture Capital."
Young Presidents' Organization Conference, January 2013, "Private Equity Trends."
In addition, made presentations of research findings for several institutional investors and investment managers who contributed data for the project on interactions between venture organizations and institutional investors.

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TEACHING

University of Chicago
Developed and taught course "Entrepreneurial Finance and Management," a second-year MBA elective, 1993–1995.

Harvard Business School
Taught "First-Year Finance," in Required Curriculum, 1995–1997.
Taught "Entrepreneurial Finance," in Elective Curriculum, 1997–2003.
Taught "The Entrepreneurial Manager," in Required Curriculum, 2003–2008.
Taught "Venture Capital and Private Equity," in Elective Curriculum, 2009–2012.
Co-developed and taught, "Private Equity Finance," in Elective Curriculum, 2012-2015.
Developed and taught, "Private Equity Field," in Elective Curriculum, 2013.
Course Head for "The Entrepreneurial Manager" in Required Curriculum 2005–2008.
Co-developed and co-taught Ph.D. course "Empirical Topics in Corporate Finance," 1999–2015. (with Josh Lerner.)
Co-developed and partially taught three-day executive courses on venture capital and private equity: "Conflict and Evolution in Private Equity" (1996), "Corporate Venture Capital: The Third Wave" (1997), "The Internationalization of Private Equity" (1998), "Structuring Effective Private Equity Organizations" (1999, 2000), "Optimizing Corporate Investments" (2000), "Doing Private Equity Deals" (2001, 2003), "Private Equity in a Downturn" (2002), "Private Equity Deals" (2004), "Private Equity and Corporate Governance" (2005), "Venture Capital and Private Equity" (2006), "Internationalization of Private Equity" (2007), "Private Equity and Venture Capital" (2008), and "Private Equity after the Downturn" (2009), "Venture Capital and Private Equity" (2010-2011). "Private Equity and Venture Capital: After the Financial Crisis" (2012), Private Equity and Venture Capital: The Future" (2013). "Private Equity and Venture Capital: At the Crossroads" (2014). "Private Equity and Venture Capital: Changing Market Power." (2015) (all with Josh Lerner.)
Co-developed and taught "Economics of Markets," in Elective Curriculum, 1997.
Partially taught in a variety of programs including:
General Management Program / START, August 1996.
HBS / CIEBA Pension Workshop, April 1996.
YPO Conference, February 1997, February 2003, February 2006, February 2008.
Strategic Finance for Small Business, February 1998, March 1999, March 2000.
Entrepreneur's Toolkit, June 1997, June 1998, June 1999.

PROFESSIONAL SERVICE AND EXPERIENCE

1985–1986 BAYER CHEMICAL CO. LEVERKUSEN, GERMANY
Researcher. Performed biochemical analysis on locust flight muscle metabolism.

1997–present Associate Editor for *Small Business Economics*.

1997–present Associate Editor for *Journal of Private Equity*.

1997–present Associate Editor for *Journal of Finance*.

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1997–present	Western Finance Association Meetings Program Committee.
1998	Program Committee, *Journal of Financial Economics* conference on research methodologies in finance.
2006–present	Associate Editor for *Journal of Economic Literature.*
2010–present	Associate Editor for *Journal of Economics and Management Strategy.*

Referee for the *Journal of Financial Economics*, *Journal of Finance*, *Journal of Political Economy*, *Quarterly Journal of Economics, Rand Journal of Economics*, *Review of Financial Studies*, *American Economic Review*, *Journal of Public Economics*, *Journal of Corporate Finance*, *Journal of Small Business Management*, *Economic Letter, Small Business Economics*, *Journal of Business Venturing*, *Journal of Small Business Finance*, *Journal of Business*, *Journal of Law*, *Economics*, *and Organizations*, and *Journal of Law and Economics*.

Reviewer for reports and proposals for the National Science Foundation.

Reviewer for reports and proposals for the Securities and Exchange Commission.

COMMUNITY SERVICE

Board Member, Beth Israel Deaconess Hospital, (2014-2015).
Board member, Friends of Harvard Track, (2014-2015).
Board Member, USA Triathlon Foundation, (2015)
Beth Israel Deaconess Wellness Center Advisory Board (2013-2015)
Vice President, Treasurer, and Executive Board Member, Harvard Hillel (1995–2010).
Board Member, Camp Yavneh (2007–2010).
Ivy League Eikeden Committee (1997–2010)
Young Israel of Brookline, Internet Advisory Board (2000–2001).
Technion Institute of Management: Boston Advisory Board (2000).
Board Member, Anshe Shalom B'nei Israel Congregation (1993–1995).

CONSULTING PROJECTS

Apax Venture Partners, 2003.
Battery Venture Partners, 2001.
Bessemer Venture Partners, 1998.
Deloitte and Touche, 2003.
Department of Energy, Idaho Falls National Laboratory, 1994–1995.
Department of Energy, Savannah River National Laboratory, 1995–1997.
Department of Energy, Butte, Montana National Laboratory, 1997–1998.
E.M. Warburg, Pincus, 1997.
Ernst and Young, 2002.
GTCR Golder Rauner, 1999.
Jerusalem Venture Partners, 2001.
Montana Science and Engineering, Inc., 1997.
Patricoff & Co., 1995.

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Phillip's Petroleum, 1998, 2000, 2001, 2002.
PriceWaterhouse Coopers, 2001.
RogersCasey Investment Advisors, 1994.
Salomon Smith Barney, 1999–2003.
TA Associates, 2015.
Thermo Electron Corporation, 1994–1997.
VentureOne, 1995.

BOARDS OF DIRECTORS AND ADVISORY BOARDS

Evergreen Partners, 2005–2015.
Gemini Venture Capital, 2003–2015.
Highland Capital Consumer Fund, 2007–2015.
Khosla Ventures, 2009-2015.
Knightsbridge Investment Advisers, 1995–2012.
Mercanteo, 1999.
New Capital Partners, 2000–2001.
Onpoint Technology Ventures, 2003–2015.
OnTheFrontier.com, 2000–2001.
Spur Capital Partners, 2002–2015.
Triple Point Capital, 2003.
ZEFER, 1998.

GRANTS AND AWARDS

National Science Foundation Grant, 1994–1997, "Financing New Business Formation."
National Science Foundation Grant, 2002–2005, "Corporate Governance and Firm Performance."
National Institute of Standards and Technology, Advanced Technology Program, 1996–1997, "Venture Capital and the Financing of Emerging Technologies."
Newcomen Business History Paper Prize, 1994.
American Association of Individual Investors Award for Best Paper on Investments, at the Western Finance Association Meeting, 1998.
Journal of Financial Economics, Fama-DFA Price, Second Prize, 2008.
Journal of Finance, Smith Breeden Distinguished Paper Prize, 1998.
Rodney White Center for Financial Research, Best Paper Prize, 2002.
MBA Class of 1961 Fellow, 1997–1998.

ATHLETICS

Alternate on the 1988 Olympic team in the marathon. Finished fourth in the Olympic trials. Qualified for 1984, 1988, 1992 Olympic marathon trials. Cross-Country All-American. Academic All-American. Set World Junior Record in the marathon (1983). Bronze medalist in 1985 World University Games in Japan (marathon). Qualified for two US cross-country teams and competed in the World Championships. Set Harvard Records in the 5,000 and 10,000 meters. Triathlon Age Group All-American 2007, 2009, 2010, 2013, 2014. Ranked second in the world by World Triathlon Corporation in Age Group at the Ironman 70.3 distance in 2014. Competed in ITU Age Group World

Championships (2007, 2015). Competed in Ironman 70.3 World Championship (2007). Competed in Ironman World Championships in Kailua Kona (2009, 2010).

Exhibit 2
Paul A. Gompers
Expert Depositions and Testimony for Prior Five Years

Testimony of Paul A. Gompers in United States v. Anthony Cuti and William Tennant, on behalf of William Tennant, United States District Court for the Southern District of New York, Case No. 08 CR 972 (June 22, 2011; June 23, 2011).

Deposition of Paul A. Gompers in In Re Tronox, Inc. Securities Litigation, on behalf of Ernst & Young LLP, Thomas Adams, Mary Mikkelson and Marty Rowland, United States District Court for the Southern District of New York, Case No. 09-cv-06220-SAS (October 11, 2011).

Deposition of Paul A. Gompers in Paul Luman v. Paul G. Anderson, et al., on behalf of FCStone Group, Inc., Paul G. Anderson, and William J. Dunaway, United States District Court for the Western District of Missouri, Case No. 08-cv-00681 (December 1, 2011).

Deposition of Paul A. Gompers in The Dispatch Printing Company, et al. v. National City, et al., on behalf of Corsair, Court of Common Pleas of Franklin County, Ohio, Case No. 08CVH-6506 (December 7, 2011).

Deposition of Paul A. Gompers in In Re Pfizer Inc. Securities Litigation, on behalf of Pfizer Inc., Henry A. McKinnell, John L. LaMattina, Karen L. Katen, Joseph M. Feczko, and Gail Cawkwell, United States District Court for the Southern District of New York, Case No. 04 Civ. 9866 (January 12, 2012).

Deposition of Paul A. Gompers in In Re Pfizer Inc. Securities Litigation, on behalf of Pfizer Inc., Henry A. McKinnell, John L. LaMattina, Karen L. Katen, Joseph M. Feczko, and Gail Cawkwell, United States District Court for the Southern District of New York, Case No. 04 Civ. 9866 (May 15, 2012).

Deposition of Paul A. Gompers in In Re Toyota Motor Corporation Securities Litigation, on behalf of Toyota Motor Corporation, United States District Court for the Central District of California, Case No. CV-10-0922 DSF (June 13, 2012).

Deposition of Paul A. Gompers in Baker v. Goldman, Sachs & Co., et al., and Roth, et al. v. Goldman, Sachs & Co., on behalf of Goldman, Sachs & Co., The Goldman Sachs Group, Inc., and Goldman, Sachs & Co. L.L.C., United States District Court for the District of Massachusetts, Civil Action No. 09-10053-PBS and No. 10-10932-PBS (July 19, 2012).

Deposition of Paul A. Gompers in In Re Merck & Co., Inc. Securities Litigation, on behalf of Merck & Co., Inc., United States District Court for the District of New Jersey, Case No. 3:05-CV-01151-SRC-MF and No. 3:05-CV-02367-SRC-MF (September 11, 2012).

Testimony of Paul A. Gompers in Baker v. Goldman, Sachs & Co., et al., and Roth, et al. v. Goldman, Sachs & Co., on behalf of Goldman, Sachs & Co., The Goldman Sachs Group, Inc., and Goldman, Sachs & Co. L.L.C., United States District Court for the District of Massachusetts, Civil Action No. 09-10053-PBS and No. 10-10932-PBS (January 16, 2013).

Arbitration Testimony of Paul A. Gompers in Paradise v. Credit Suisse Securities (USA) LLC, et al., on behalf of Credit Suisse Securities (USA) LLC, American Arbitration Association, Arbitration No. 50 512 T 00865 11 (January 23, 2013).

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Deposition of Paul A. Gompers in Rick L. Stratford v. Peterson Capital I, LLC, et al. and Peterson Capital I, LLC, et al. v. Rick L. Stratford, Third Judicial District Court of Salt Lake County, State of Utah, Case No. 120900633 (April 10, 2013).

Deposition of Paul A. Gompers in Mark Smilovits, Individually and on Behalf of All Other Persons Similarly Situated v. First Solar, Inc., et al., United States District Court for the District of Arizona, Case No. CV 12-00555-PHX-DGC (June 11, 2013).

Deposition of Paul A. Gompers in Hollywood Media Corp., f/k/a Hollywood.com, Inc., National Amusements, Inc. and Movietickets.com, Inc. v. AMC Entertainment, Inc., Circuit Court of the 15th Judicial Circuit in and for Palm Beach County, Florida, Case No. 50 2011 CA 016684XXXX Division A1 (July 10, 2013).

Deposition of Paul A. Gompers in In Re Pfizer Inc. Securities Litigation, on behalf of Pfizer Inc., Henry A. McKinnell, John L. LaMattina, Karen L. Katen, Joseph M. Feczko, and Gail Cawkwell, United States District Court for the Southern District of New York, Case No. 04 Civ. 9866 (August 7, 2013).

Deposition of Paul A. Gompers in IBEW Local 90 Pension Fund v. Deutsche Bank AG, et al., on behalf of Deutsche Bank AG, United States District Court for the Southern District of New York, Case No. 1:11-cv-04209-KBF (September 18, 2013).

Deposition of Paul A. Gompers in Kenneth J. Novack, as Representative of the Former Shareholders of Retail Convergence, Inc. v. GSI Commerce, Inc., et al., Commonwealth of Massachusetts Superior Court Department of the Trial Court, Civil Action No. SUCV2011-2086-BLS2 (September 25, 2013).

Testimony of Paul A. Gompers in IBEW Local 90 Pension Fund v. Deutsche Bank AG, et al., on behalf of Deutsche Bank AG, United States District Court for the Southern District of New York, Case No. 1:11-cv-04209-KBF (October 4, 2013).

Deposition of Paul A. Gompers in Hollywood Media Corp., f/k/a Hollywood.com, Inc., National Amusements, Inc. and Movietickets.com, Inc. v. AMC Entertainment, Inc., Circuit Court of the 15th Judicial Circuit in and for Palm Beach County, Florida, Case No. 50 2011 CA 016684XXXX Division A1 (October 14, 2013).

Testimony of Paul A. Gompers in United States of America v. Mathew Martoma, on behalf of Mathew Martoma, United States District Court for the Southern District of New York, Case No. 1:12-cr-00973-PGG (January 29, 2014).

Deposition of Paul A. Gompers in Kirk Dahl, et al. v. Bain Capital Partners, LLC, et al., United States District Court for the District of Massachusetts, Case No. 1:07-cv-12388-EFH (February 28, 2014).

Arbitration Testimony of Paul A. Gompers in Diana Peterson v. Jordan Clements, on behalf of Diana Peterson, American Arbitration Association, Arbitration No. 77 148 Y 00251 13 (March 6, 2014).

Deposition of Paul A. Gompers in Anwar, et al. v. Fairfield Greenwich Limited, et al., on behalf of Citco, United States District Court for the Southern District of New York, Master File No. 09-cv-118

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(VM) (March 31, 2014).

Testimony of Paul A. Gompers in Kenneth J. Novack, as Representative of the Former Shareholders of Retail Convergence, Inc. v. GSI Commerce, Inc., et al., Commonwealth of Massachusetts Superior Court Department of the Trial Court, Civil Action No. SUCV2011-2086-BLS2 (April 24, 2014).

Deposition of Paul A. Gompers in Justin M. Scott v. Putnam, LLC d/b/a Putnam Investments, et al., on behalf of Putnam and Marsh & McLennan, United States District Court for the District of Massachusetts, Case No. 1:11-cv-11082-RWZ (May 6, 2014).

Deposition of Paul A. Gompers in HealthCare Royalty Partners, L.P., v. Shionogi, Inc., on behalf of HealthCare Royalty Partners, L.P., Supreme Court of the State of New York, County of New York, Case No. 650424/2012 (July 9, 2014).

Deposition of Paul A. Gompers in Amazon.com, Inc. & Subsidiaries v. Commission of Internal Revenue, on behalf of Commission of Internal Revenue, United States Tax Court, Tax Court Docket No. 31197-12 (August 20, 2014).

Testimony of Paul A. Gompers in In Re Groupon Inc. Securities Litigation, on behalf of Groupon, Inc., United States District Court for the Northern District of Illinois, Case No. 12-cv-2450 (September 11, 2014).

Deposition of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (October 30, 2014).

Deposition of Paul A. Gompers in City of Austin Police Retirement System, Individually and on Behalf of All Others Similarly Situated v. Kinross Gold Corporation, et al., on behalf of Kinross Gold Corporation, United States District Court for the Southern District of New York, Case No. 1:12-cv-01203-VEC (November 11, 2014).

Testimony of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (December 15, 2014).

Testimony of Paul A. Gompers in Amazon.com, Inc. & Subsidiaries v. Commission of Internal Revenue, on behalf of Commission of Internal Revenue, United States Tax Court, Tax Court Docket No. 31197-12 (December 16, 2014).

Deposition of Paul A. Gompers in In Re Dole Food Co, Inc., Stockholder Litigation and In Re Appraisal of Dole Food Company, Inc., Court of Chancery of the State of Delaware, Case Nos. 8703-VCL and 9079-VCL (December 19, 2014).

Deposition of Paul A. Gompers in Dr. David Beach and Christopher Kelly, et al. v. Citigroup Alternative Investments LLC and Citigroup Inc., on behalf of Citigroup Alternative Investments, United States District Court for the Southern District of New York, Case No. 12-cv-7717(GHV) (January 22, 2015).

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Deposition of Paul A. Gompers in Ellen Pao v. Kleiner Perkins Caufield & Byers LLC, et al., on behalf of Kleiner Perkins Caufield & Byers LLC, Superior Court of the State of California, City and County of San Francisco, Case No. CGC-12-520719 (February 9, 2015).

Testimony of Paul A. Gompers in In Re Dole Food Co, Inc., Stockholder Litigation and In Re Appraisal of Dole Food Company, Inc., Court of Chancery of the State of Delaware, Case Nos. 8703-VCL and 9079-VCL (March 2, 2015).

Testimony of Paul A. Gompers in Ellen Pao v. Kleiner Perkins Caufield & Byers LLC, et al., on behalf of Kleiner Perkins Caufield & Byers LLC, Superior Court of the State of California, City and County of San Francisco, Case No. CGC-12-520719 (March 19, 2015).

Deposition of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (March 25, 2015).

Deposition of Paul A. Gompers in In Re Goldman Sachs Group, Inc. Securities Litigation, on behalf of The Goldman Sachs Group, Inc., United States District Court for the Southern District of New York, Case No. 1:10-cv-03461-PAC (April 30, 2015).

Deposition of Paul A. Gompers in In Re MiMedx Group, Inc. Securities Litigation, on behalf of MiMedx Group, Inc., United States District Court for the Northern District of Georgia, Atlanta Division, Civil Action No. 1:13-cv-03074-TWT (June 3, 2015).

Deposition of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (June 18, 2015).

Testimony of Paul A. Gompers in Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al., on behalf of Barclays PLC, United States District Court for the Southern District of New York, Case No. 1:12-cv-5329-SAS (July 15, 2015).

Deposition of Paul A. Gompers in In Re Goldman Sachs Group, Inc. Securities Litigation, on behalf of The Goldman Sachs Group, Inc., United States District Court for the Southern District of New York, Case No. 1:10-cv-03461-PAC (September 9, 2015).

Deposition of Paul A. Gompers in In Re Marriage of Martha Ehmann Conte and Jean-Pierre L. Conte, on behalf of Martha Ehmann Conte, Superior Court of the State of California, City and County of San Francisco, Case No. FDI-10-773039 (September 25, 2015).

Deposition of Paul A. Gompers in In Re Intercept Pharmaceuticals, Inc. Securities Litigation, on behalf of Intercept Pharmaceuticals, Inc., United States District Court for the Southern District of New York, Civil Action No. 1:14-cv-01123-NRB (October 2, 2015).

Deposition of Paul A. Gompers in In Re NII Holdings, Inc. Securities Litigation, on behalf of NII Holdings, Inc., United States District Court for the Eastern District of Virginia, Alexandria Division, Case No. 1:14-cv-00227-LMB-JFA (October 23, 2015).

Exhibit 2
Paul A. Gompers
Expert Depositions and Testimony for Prior Five Years

Deposition of Paul A. Gompers in David M. Loritz, et al. v. Exide Technologies, et al., on behalf of the individual defendants, United States District Court for the Central District of California, Master File No. 2:13-cv-02607-SVW-E (November 3, 2015).

Deposition of Paul A. Gompers in Första AP-Fonden and Danske Invest Management A/S, Individually and on Behalf of All Others Similarly Situated v. St. Jude Medical, Inc., et al., on behalf of St. Jude Medical, Inc., United States District Court for the District of Minnesota, Civil No. 12-3070 (JNE/HB) (November 6, 2015).

Deposition of Paul A. Gompers in In Re Petrobras Securities Litigation, on behalf of the individual defendants, United States District Court for the Southern District of New York, Case No. 14-cv-9662 (November 11, 2015).

Testimony of Paul A. Gompers in Andrew Segal, M.D. v. Genitrix, LLC, H. Fisk Johnson, III and Stephen Rose, on behalf of the individual defendants, Commonwealth of Massachusetts Superior Court Department, Civil Action No. 09-776-G (November 18, 2015).

Deposition of Paul A. Gompers in In Re Montage Technology Group Limited Securities Litigation, on behalf of Montage Technology Group Limited, United States District Court for the Northern District of California, Case No. 3:14-cv-00722-SI (January 20, 2016).

Deposition of Paul A. Gompers in In Re Symbol Technologies, Inc. Securities Litigation, on behalf of Symbol Technologies, Inc. and the individual defendants, United States District Court for the Eastern District of New York, Civil Action No. 05-CV-3923-DRH (January 27, 2016).

Deposition of Paul A. Gompers in In Re Amgen, Inc. Securities Litigation, on behalf of Amgen, Inc., United States District Court for the Central District of California, Western Division, Case No. CV 07-2536 PSG (PLAx) (February 25, 2016).

Deposition of Paul A. Gompers in In Re Comverge, Inc. Shareholders Litigation, on behalf of the Comverge directors, Court of Chancery of the State of Delaware, Consolidated C.A. No. 7368-VCP (March 24, 2016).

Deposition of Paul A. Gompers in Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C. v. Virgin Media Inc., on behalf of Musashi, L.L.C. and W.R. Huff Asset Management Co., L.L.C., Superior Court of New Jersey, Law Division: Morris County, Civil Action No. MRS-L-734-13 (June 1, 2016).

Exhibit 3
Documents Relied Upon

Document Title	Document Date
Legal Pleadings and Court Opinions	
Opinion of the Supreme Court of the United States, *In re: Comcast Corporation, et al. v. Caroline Behrend et al.*, No. 11-864, 569 U.S.	March 27, 2013
Amended Complaint for Violation of the Federal Securities Laws, *In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al.*	April 4, 2013
Opinion and Order of the United States District Court for the Southern District of Ohio. No. 2:12–cv–604 – Judge Michael Wilson, *In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al.*	January 21, 2016
Expert Reports and Depositions	
Expert Report of Bjorn I. Steinholt, CFA, *In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al.*	May 27, 2016
Deposition of Bjorn I. Steinholt, *In re: Alan Willis, Individually and on Behalf of All Others Similarly Situated, v. Big Lots, Inc., et al.*	July 21, 2016
Academic Articles and Other Reports	
Adam Bonnier and Robert F. Bruner, “An Analysis of Stock Price Reaction to Management Change in Distressed Firms,” Journal of Accounting and Economics, Vol. 11	1989
Bradford Cornell and R. Gregory Morgan, “Using Finance Theory to Measure Damages in Fraud on the Market Cases,” *UCLA Law Review*, Vol. 37	1990
Eugene Fama, “Efficient Capital Markets: II,” The Journal of Finance, Vol. 46, No. 5	December 1991
John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, “The Econometrics of Financial Markets,” Princeton University Press	1997
A. Craig MacKinlay, “Event Studies in Economics and Finance,” *Journal of Economic Literature*, Vol. 35	March 1997
Public Press	
“Big Lots Reports Record Results,” PR Newswire	March 2, 2012
Telsey Advisory Group Presentation Schedule, http://www.telseygroup.com/files/March2012PresentationAgenda.pdf, accessed February 8, 2016	March 28, 2012
Piper Jaffray Consumer Conference Schedule, http://www.piperjaffray.com/pdf/ConsumerSchedule4-17-12v2.pdf, accessed February 8, 2016	April 17, 2012
“Big Lots Updates First Quarter Sales Guidance,” PR Newswire	April 23, 2012
“Big Lots Reports First Quarter Adjusted EPS From Continuing Operations of $0.68 Per Diluted Share,” PR Newswire	May 23, 2012
“Big Lots Reports Second Quarter EPS From Continuing Operations of $0.36 Per Diluted Share,” PR Newswire	August 23, 2012

Exhibit 3
Documents Relied Upon

Document Title	Document Date
SEC Filings	
Big Lots, Inc. Form 10-K for the period ended January 30, 2016	March 29, 2016
Big Lots, Inc. Form 8-K and exhibits	March 7, 2012
Big Lots, Inc. Form 8-K and exhibits	August 28, 2012
Data Sources	
Production for the Expert Report of Bjorn I. Steinholt	

Exhibit 4

Analysis, Using Mr. Steinholt's Regression Results, of the Statistical Significance of the Residual Stock Price Returns Associated with the Alleged Misrepresentations that Remain after the Court's Ruling on Defendants' Motion to Dismiss

Alleged Misrepresentation Day			Next Day		Probable Impact Date to Consider	
Date	**Events Related to Alleged Misrepresentations According to the Complaint**	**Statistically Significant Abnormal Return**	**Date**	**Statistically Significant Abnormal Return**	**Date**	**Statistically Significant Abnormal Return**
3/2/12	Big Lots provided financial guidence in a press release and held an investor earnings call. (Complaint ¶¶ 67-9)	Yes (-3.9%)	3/5/12	No	3/2/12[1]	Yes (-3.9%)
3/7/12	Big Lots filed a form 8-K that included a copy of the press release and a transcript of the earnings conference call. (Complaint ¶ 75)	No	3/8/12	No	3/8/12[2]	No
3/26/12	Big Lots filed a form 10-K with the SEC. (Complaint ¶ 83)	No	3/27/12	No	3/27/12[3]	No
3/27/12	Big Lots' executives participated in Telsey Advisory Group's 4th Annual Spring Consumer Conference. (Complaint ¶ 88)	No	3/28/12	No	3/27/12[4]	No
4/9/12 or 4/10/12	Big Lots released its 2011 Annual Report. (Complaint ¶¶ 96-9)	No / No	4/10/12 or 4/11/12	No / No	4/9/12, 4/10/12, or 4/11/12[5]	No / No / No
4/23/12	Big Lots issued a press release in which financial information was provided. (Complaint ¶ 102)	No	4/24/12	Yes (-23.8%)	4/24/12[6]	Yes (-23.8%)
5/23/12	Big Lots issued a press release with financial guidance and held an investor earnings call. (Complaint ¶¶ 110-3)	No	5/24/12	No	5/23/12[7]	No
5/29/12	Big Lots filed a form 8-K that included a copy of the press release and a transcript of the earnings conference call. (Complaint ¶ 120)	No	5/30/12	No	5/30/12[8]	No
6/5/12	Big Lots' executives participated in the 32nd Piper Jaffray Consumer Conference. (Complaint ¶ 122)	No	6/6/12	No	6/5/12[9]	No

Source: Expert Report of Bjorn Steinholt, 5/27/16; Amended Complaint, 4/4/13; sec.gov; Telsey Advisory Group Presentation Schedule, http://www.telseygroup.com/files/March2012PresentationAgenda.pdf, accessed 2/8/16; Piper Jaffray Consumer Conference Schedule, http://www.piperjaffray.com/pdf/ConsumerSchedule4-17-12v2.pdf, accessed 2/8/16; PR Newswire, "Big Lots Reports Record Results," 3/2/12; PR Newswire, "Big Lots Updates First Quarter Sales Guidance," 4/23/12; PR Newswire, "Big Lots Reports First Quarter Adjusted EPS From Continuing Operations Of $0.68 Per Diluted Share," 5/23/12

Notes:

[1] The press release with the title "Big Lots Reports Record Results" was published by PR Newswire at 6:00 AM ET on 3/2/12. The press release indicated that the investor earnings call would be held at 8:00 AM ET.

[2] Big Lots' Form 8-K was accepted by the SEC at 4:10 PM ET on 3/7/12.

[3] Big Lots' Form 10-K was accepted by the SEC at 4:49 PM ET on 3/26/12.

[4] Steven S. Fishman presented at the Telsey Advisory Group's 4th Annual Spring Consumer Conference in the morning of 3/27/12 according to a 3/28/12 presentation agenda.

[5] Big Lots' annual report to shareholders was issued on 4/9/12 or 4/10/12. The exact day and time of the release are unknown.

[6] The press release with the title "Big Lots Updates First Quarter Sales Guidance" was published by PR Newswire at 4:05 PM ET on 4/23/12.

[7] The press release with the title "Big Lots Reports First Quarter Adjusted EPS From Continuing Operations Of $0.68 Per Diluted Share" was published by PR Newswire at 6:00 AM ET on 5/23/12. The conference call transcript attached to the 5/29/12 Form 8-K indicates that the earnings conference call was held at 8:00 AM ET on 5/23/12.

[8] Big Lots' Form 8-K was accepted by the SEC at 4:23 PM ET on 5/29/12.

[9] A Piper Jaffray conference schedule dated 4/17/12 indicates that Big Lots' executive may have talked at this conference during trading hours.